

4. FACILITIES PLAN: PROPOSED CONDITIONS

development projects between these two entities and the university. If either entity vacates these locations, the land reverts back to the Board of Regents.

The 2015 Campus Master Plan Update recommends redeveloping and intensifying lands, to the extent allowed by soil conditions, that are now occupied by the McClimon Sports complex and Lot 60.

The 2015 Campus Master Plan Update continues to recommend the relocation of the McClimon Track/Soccer complex to the Lot 60 area to provide a more green pervious surface next to the lake. In order to facilitate this proposal, replacement parking for the cars in Lot 60 would need to be developed first, including a new interior parking structure in the development of expanded Health Science Buildings (W-09A) (1,500 spaces) on the former track location. This, along with the hospital ramp addition (W-02) and potential joint parking at the Veterans Hospital and/or USDA Forest Products Lab, would provide the necessary replacement parking for the loss of the 1,200+ surface spaces at Lot 60.

The new track would provide a fully developed outdoor track complex (W-05) with a competition soccer field in the center. A soccer practice facility would be developed to the east toward the lake, providing infiltration capacity for on-site stormwater needs. Both a separate competition soccer facility and a soccer field incorporated into the track remain options to further investigate.

The recommended relocation of the track complex allows for extensive future development of academic and research facilities for the health sciences. An additional three floors may be added to one wing of Signe Skott Cooper Hall (W-08), and a new 6-story structure may be constructed on Lot 85. A newly created parking structure (W-09A) would be wrapped with potential office spaces (W-09B) and have a proposed academic/research facility to the north (W-09C). Additional health science office-based research space could be created around the base of the existing WARF Building (W-11).

Also in this area, the 2015 Campus Master Plan Update recommends the development of a new mixed-use building that may include meeting rooms, dining, gathering spaces, and possibly academic or office spaces (W-06). As the West Campus redevelops and becomes nearly as dense as the existing South Campus, meeting rooms, food service, and general social space for faculty, staff, students, patients, and visitors is needed on the West Campus. Outdoor terrace seating areas should face and connect to the lake off the northeast corner of the building. A second level terrace would overlook the Soccer complex to the north and the band practice and recreation fields to the east.

In the West Campus, fairly large buildings are being planned around new quadrangles of green space. The mixed-use building should be sited to preserve views of Lake Mendota from the UW Hospital and extend an open space corridor from the Health Sciences Learning Center, south of Rennebohm Hall, and north of Signe Skott Cooper Hall and on to Lake Mendota. Preservation areas, Class of 1918 Marsh, existing and recommended stormwater treatment areas, recreation fields, and the Howard Temin Lakeshore Path maintain a connected open space network along Lake Mendota. The open spaces are also outdoor laboratories for the Department of Botany, the Department of Landscape Architecture, and the College of Engineering, as described in the Lakeshore Nature Preserve Master Plan. The linking of open spaces is key to the overall connectedness of the plan for the West Campus and starts to create a more campus-like neighborhood rather than the existing suburban neighborhood character with huge buildings with no formal outdoor spaces.

The existing West Campus Recreation Fields, north of the Waisman Center and northwest of the Nielsen Tennis Stadium, remain as recreation fields in the 2015 Campus Master Plan Update. The large outdoor fields serve an important function for the campus and will continue to do so in the future.

Other proposed facilities include a near-term reconstruction of the Walnut Street Greenhouses (W-12) that will expand greenhouse space and avoid shading from the Walnut Street Cogeneration Plant to the south.

Several areas on campus are set aside in the 2015 Campus Master Plan Update as major service and infrastructure points. The West Campus service area houses the Physical Plant Operations/Grounds Facilities and the West Campus Cogeneration Facility. The 2015 Campus Master Plan Update recommends a long-term redevelopment of the Grounds offices and storage facilities now located along the west bank of Willow Creek. To reduce runoff of stored materials and allow for the creation of wetland and stormwater facilities that will improve the water quality of Willow Creek and Lake Mendota, Grounds facilities will be relocated into new and existing structures. A new office/administration building, controlled temperature storage, and covered vehicle storage facilities will be constructed south of Linden Drive around the existing incinerator. New greenhouse and salt storage facilities will be constructed on the federal Barley and Malt Laboratory site east of Walnut Street and south of the Walnut Street Heating Plant.



Figure 4-8 Far West And West Campus Illustration

Near West Campus

The general goals for the Near West Campus district are to:

- Increase building density to provide for potential future growth in agricultural and life sciences
- Replace single-story buildings to better tie the West and Central Campuses together in a more traditional campus setting building
- Improve the Willow Creek corridor and water quality through adjacent site redevelopment and wetland and stormwater facilities
- Capture and treat stormwater along the Linden Drive and Observatory Drive corridors, creating a new campus “green neighborhood”

Near West Campus Design Neighborhood

In the Near West Campus district, a goal is to increase overall density and expand social and working open spaces. Currently the area is a mixture of low or single-story Agricultural Farm Buildings and higher density research and academic facilities. The Near West Campus will not only continue to maintain its land grant Agricultural Buildings but also increase density to allow for new research facilities to be constructed.

A large near-term academic and research facility is a new Veterinary Medicine hospital and research facility (W-17), which will be an expansion of small animal clinical and research programs in the new building and renewal of portions of the existing small and large animal hospitals. The expansion will occur on the site of the existing 410-stall Lot 62, and parking will be replaced in a new 625-stall parking structure (W-27).

The pre-design for the new Veterinary Medicine hospital and research facility requires two at-grade connector hallways between the existing and proposed structures, cutting off Linden Drive. In order to improve the Willow Creek corridor by replacing impermeable driving surfaces with permeable and attractive open spaces, the 2015 Campus Master Plan Update recommends that Easterday Lane be removed. Circulation to the existing small animal drop-off will be accommodated by a reconstruction of the existing pedestrian/utility bridge over Willow Creek into a wider bridge that will accommodate vehicles. Access to the east side of the new Veterinary Medicine Hospital will occur off Linden Drive, and large animal loading and drop-off along the east and south sides of the existing hospital.

Systematic reconstruction of facilities along the south side of Observatory Drive and west of Elm Drive will provide additional space for new and expanded agricultural research facilities. The first project, the Meat Science and Muscle Biology Building (W-18), will replace the existing Meat and Muscle Biology facility. This new 2-story, modern teaching, research, and outreach facility will support the meat industry of the State of Wisconsin. Future sites along the south edge of Observatory Drive are a Poultry and Livestock Laboratory Building (W-20) and Biological Systems Engineering Building (W-19).

These new facilities should be sited along and be serviced by Observatory Drive. Areas south of these new structures should be reserved for an open space corridor between the Horse Barn and Meat Science and Muscle Biology Building. The open space will support the repurposing of the Horse Barn (perhaps as an event space) and provide an appropriate setting for the

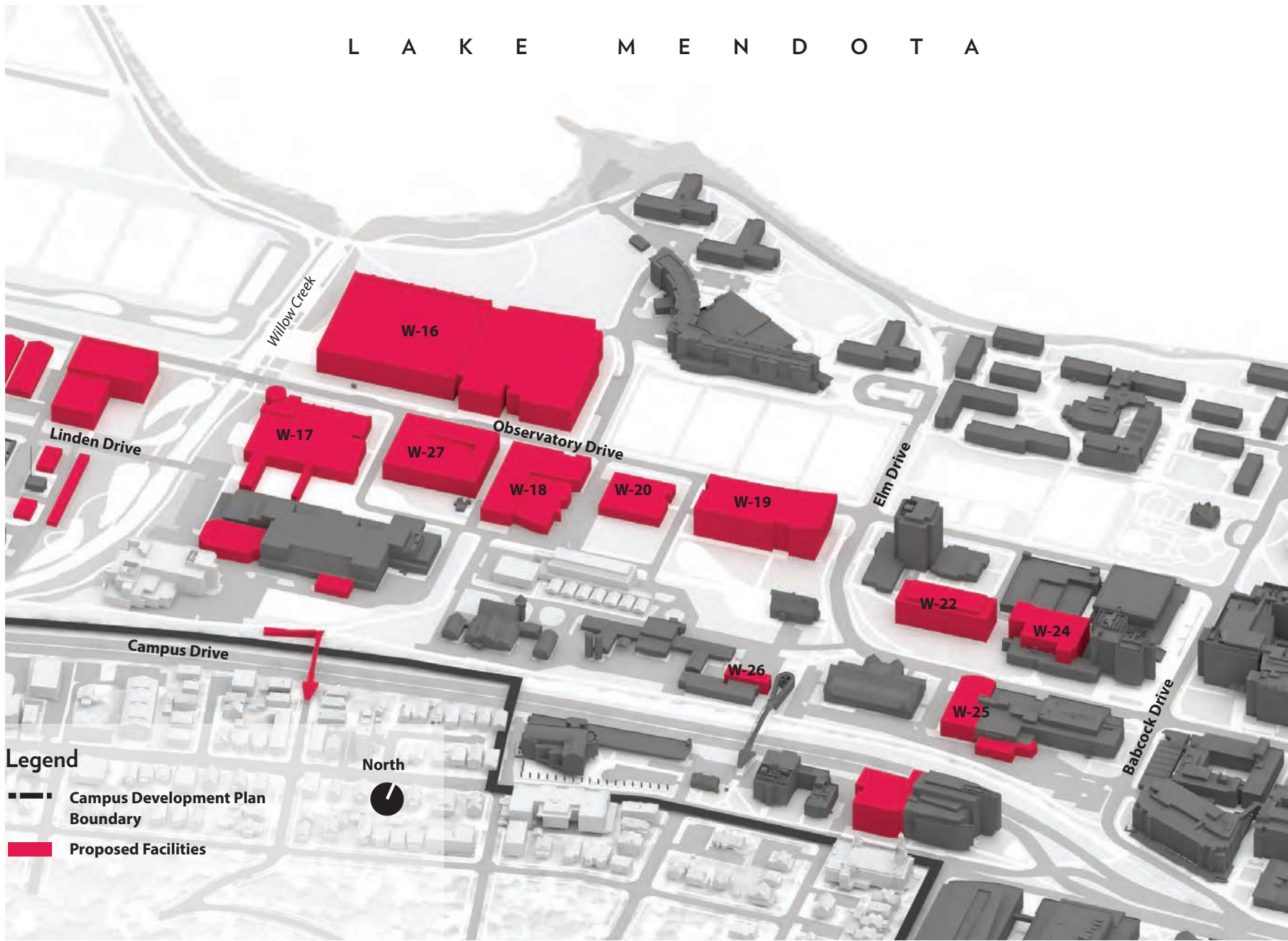


Figure 4-9 Near West Campus Building Key

characteristic agricultural land grant buildings of the Horse Barn and Dairy Cattle Center. The open space should also function as stormwater capture and cleaning, a part of the “green neighborhood” system.

The existing Meat and Muscle Biology facility lies within the railroad right-of-way, and it blocks one of the two remaining missing links of the campus off-street bicycle network. When the existing Meat and Muscle Biology Building is repurposed, the portion of the building in the railroad right-of-way should be studied for removal and any necessary expansion on the north facade (W-26), allowing for the eastward continuation of the commuter path.

To the east of Elm Drive, north of the existing historic Stock Pavilion and north of Linden Drive are sites for a new Plant Sciences Building (W-24) and a Animal Sciences (AHABS) Building (W-22).

Lakeshore Campus Design Neighborhood

With the construction of Dejope Residence Hall and Leopold Hall since the 2005 Campus Master Plan, no expansion of residential beds is planned for the Lakeshore Residences Neighborhood. Incremental renovations and improvements of existing halls will continue, but density will not further increase. Rather, recreational-related projects will improve the desirability of this historic neighborhood. A goal is that the residential neighborhood be organized around major areas of open space and maintain the existing active recreation fields for student enjoyment and active exercise.

The existing Natatorium is undersized, overused, and cannot be renovated effectively. The 2015 Campus Master Plan Update recommends a new recreational facility (W-16) on the same site. The replacement facility will be larger to accommodate increased activity and residents in the Lakeshore Residences Neighborhood and recreational facilities relocated from elsewhere on campus. The scale of the new facility will overwhelm the largely small-scale character of the Lakeshore Residential Neighborhood, so it must be sited and planned carefully. Its height should be no higher than Dejope Residential Hall. A minimum 75-foot setback from Willow Creek will provide active and passive open space that is focused on the creek, and a 25-foot setback from the effigy mounds located north of the site. A new pedestrian bridge should connect the Near West Fields with the Natatorium.

The Near West Fields will soon be upgraded. The existing fields, at approximately 383,140 gross square feet, will be re-graded to create five synthetic turf flag football fields and one championship soccer field. Existing stormwater treatment along the south and east edges of the existing fields will be maintained.

Like the Near West Fields, the Near East Recreation Fields, located on Observatory Drive just west of Elm Drive, are slated to be rebuilt with synthetic turf fields in the Recreational Facility Master Plan. These fields sit at the confluence of several large storm sewers that collect a vast tributary area before discharging to Lake Mendota. Approximately 32 acres of stormwater runoff pass by this site, from as far away as Henry Mall. When reconstructed, the Near East Fields should be constructed above a new underground stormwater detention chamber.



Figure 4-10 West And Near West Campus Illustration

Central Campus

General goals for the Central Campus are:

- Maintain the traditional campus arrangement of buildings around sweeping lawns and quadrangles of open space
- Create a new pedestrian environment along Linden Drive west of N. Charter Street recalling the Greater Mall concept from the 1908 Campus Plan
- Infill with new research/academic facilities where necessary but always in an understanding of the open spaces created with the new spaces
- Maintain and reuse the historic building fabric whenever possible
- Remove buildings from the 1960's and 1970's that have outlived their useful lives and can not be reprogrammed or renovated for a higher and better use

Linden Drive and Henry Mall

The south side of Linden Drive from Henry Mall to N. Charter Street will be completely reconstructed. The 2015 Campus Master Plan Update's siting of the academic/research facilities on the south side of Linden Drive seeks to strengthen the Great Mall concept from the 1908 Campus Plan by Laird and Cret. A consistent street wall on the south side will better define the open space of the Great Mall. Pedestrians will have an urban sidewalk experience on the south side of the road, and an open space path experience close to the north side building entrances. Building sites on the south side of Linden Drive are pushed north to maximize the south-facing open space on their south facades. The inclusion of a new north/south road and an east/west connector to N. Charter Street will break up this "superblock," providing porosity for those pedestrians walking between Central and South Campus. The new road connections will also allow access to the expanded parking facilities in this central block while avoiding the congested Charter Street/Linden Drive intersection.

New academic/research buildings (N-04, N-05A, N-05B, and N-06A) will replace the aging structures along the south side of Linden Drive – Stovall Building, Nutritional Sciences, McArdle Cancer Research Center, Middleton Building, Bradley Memorial Building, Bardeen Medical Laboratories, Medical Sciences, and Service Memorial Institute. A partially underground parking structure (N-06B) with 550 stalls should be located under N-05B and N-06A. Lot 20 will be replaced with a larger and more efficient parking structure (N-05C) with 375 stalls. The parking under N-06B and N-05C will allow the removal of several parking lots in the area including Lot 34 near the lake and street parking along Observatory Drive between N. Charter Street and Babcock Drive. This new central location for parking allows those that park in the

existing lots and typically work in the Central Campus location to park closer to their offices, while allowing restoration of the Observatory Hill landscape.

Across N. Charter Street, an addition on the west side of Ingraham Hall (N-14) with a possible interior occupied space will expand its footprint and capacity.

The plan recommends a future academic facility on the site of Van Hise Hall (N-03A and N-03B). The project could be developed in two phases with one being taller than the other (N-03B) as it goes up the hill to take advantage of the lake views to the north. The tower should not be more than eight stories tall. The building siting should respect the setback from Linden Drive as established in the Great Mall concept from the 1908 Campus Plan by Laird and Cret, as demonstrated by Agricultural Hall and Nancy Nicholas Hall.

The Charter Street/Linden Drive intersection is the most congested on campus. Enormous volumes of pedestrians crossing the intersection in all directions effectively shuts down the intersection for transit, service, and other vehicles during every class change. Transit busses get behind schedule during these times, and then the schedule never recovers. The 2015 Campus Master Plan Update recommends the construction of a grade-separated pedestrian bridge over the Charter Street/Linden Drive intersection. The pedestrian bridge should be constructed and connected to in phases. In all phases, the bridge should connect on the east side of Charter Street to the middle of the west side of Bascom Hill at the Van Vleck Hall lecture hall entrance/exit landing. In the existing conditions, the bridge should connect to the top of the existing Van Hise plinth deck. When Van Hise is removed and N-03A is constructed, the bridge should be extended to the upper-level pedestrian path so that it connects to the existing path south of Nancy Nicholas Hall. When N-06A is constructed, an addition to the bridge should connect to an upper floor of N-06A. Stairs, escalators, and elevators within N-06A should directly and efficiently connect pedestrians back down to Linden Drive. The concern that pedestrian bridges take away from the vitality and street life created by pedestrians using the street level crossings is outweighed by the sheer volume of pedestrians, which will use both the ground-level and pedestrian bridge.

On the east side of Henry Mall, Stovall Hall and Old Genetics should be removed and replaced by new academic/research facilities – Nutritional Sciences (N-04) and a new academic/research facility (N-07). Both buildings should be designed to maintain the massing and scale of the other buildings along Henry Mall and be of a tan brick or limestone color. Henry Mall continues to be the

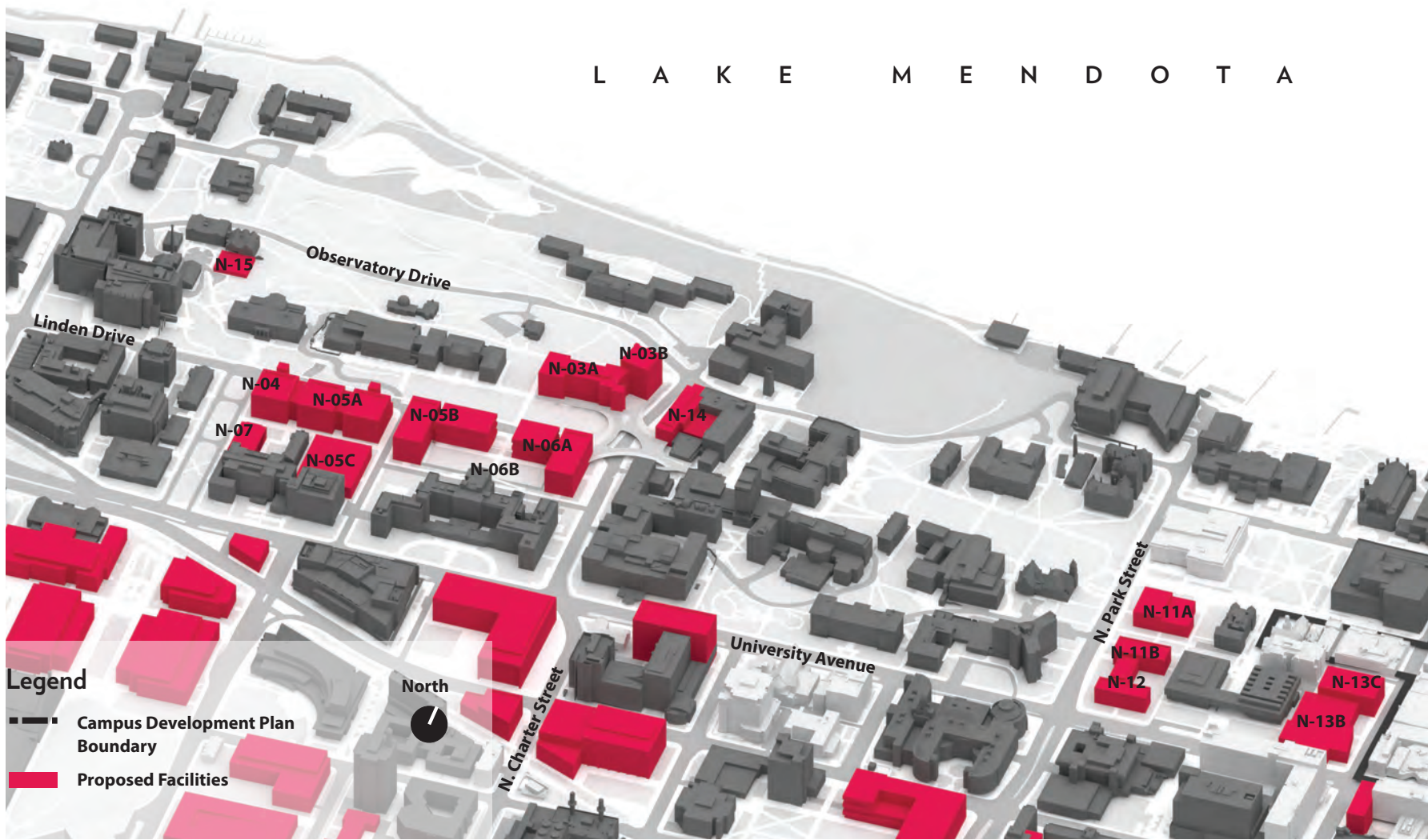


Figure 4-11 Central Campus Building Key

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transition line between buildings in the agricultural campus that have red-brown brick colorations and the cream city brick that lies east of Henry Mall.

King Hall Greenhouse expansion is enabled through N-15. All construction and maintenance near King Hall and Agricultural Hall should protect and highlight the Observatory Hill mounds.

Library Mall

The Library Mall area includes the northern section of the East Campus Mall, Chazen Museum, Humanities, and the planned music performance sites. The concept for an east campus pedestrian promenade has been around for many decades as was most recently defined as “Murray Mall” in the 1995 JJR Campus Master Plan. After the current construction of Alumni Park is complete, the north section of what is now known as East Campus Mall will be complete with the renovation of the Library Mall.

The Mosse Humanities Building, built in 1966-1969 and designed by Chicago architect Harry Weese, is recommended to be removed due to extensive physical issues with the facility and inability to reprogram the building efficiently and economically. The programs in the Humanities Building must be moved first, and they will be relocated into multiple new facilities. Music instruction and music performance will be moved to the Hamel Music Center Phases 1 and 2 (N-13B) at the corner of University Avenue and Lake Street, and Phase 3 north of it on Lake Street (N-13C). Art instruction and galleries will be moved to S-16A and other Mosse Humanities Building occupants will be moved to S-13A, both new facilities in South Campus.

After the Mosse Humanities Building is removed, two smaller academic facilities will be constructed on its site (N-11A and N-11B). Under N-11A and N-11B should be constructed as an underground two-level parking structure for approximately 450 cars to accommodate the parking needs of the lakefront. If possible the parking under both building should be designed and constructed for maximum efficiency and capacity. Traffic flow in and out of the new parking facility should be carefully studied, in coordinated with the City of Madison, to minimize congestion at the University Avenue/N. Park Street intersection.



Figure 4-12 Central Campus Illustration

South Campus

General goals for the South Campus district are:

- Maintain and develop the urban campus with higher and more dense buildings (8 to 10 stories tall between University Avenue and W. Dayton Street)
- Improve the pedestrian experience with deeper building setbacks, wider sidewalks, and streetscaping
- Site buildings to create large blocks of south-facing open space
- Maintain the existing street grid network, with the exception of one block of N. Brooks Street
- Design and program W. Dayton Street to be a festival street, related to programming at Union South, Camp Randall, and the Kohl Center
- Consolidate and move Physical Plant Services to the Lot 51 parking lot area
- Provide growth space for additional academic/research facilities by purchasing private parcels within the Campus Development Plan Boundary as they become available

The South Campus will accommodate the greatest share of university growth and change through a significant increase in density and activity. As the most urban area of campus is redeveloped, open spaces and pedestrian spaces are critical to improving the character of this disjointed campus area. This description of future redevelopment generally moves from west to east.

Concurrent with the preparation of the 2015 Campus Master Plan Update, the College of Engineering prepared a college-level facilities master plan that considered space utilization and needs, facility conditions, and the short and long-term vision for the college. The College of Engineering facilities master plan describes a short, mid, long, and extended vision for its facilities. The extended vision, incorporated into the 2015 Campus Master Plan Update, nearly completely reconstructs the southwest academic corner of campus. It is a bold vision that will take decades to implement, but will fundamentally change the effectiveness of the college, the density of South Campus, and the overall capacity of the campus.

The building changes are moderate in the short-term, transformational in the long-term. The Wisconsin Energy Institute will be expanded in the near-term for the College of Engineering (S-21), followed by a replacement for 1410 Engineering Drive (S-02), and then a replacement for the Engineering Research Building (S-01). In the long-term, Lot 17 is removed and replaced by a new Engineering Academic Building (S-23). The parking demand will be

accommodated by a 1,050 space parking structure (S-27) at N. Randall Avenue and Spring Street, removing traffic from the middle of the engineering campus. Engineering Hall will be replaced by two structures (S-24 and S-25), linking two of campuses most important open spaces – Henry Mall and Camp Randall Memorial Park. The Wendt Commons facility will be removed, allowing Union South to connect through open space to Camp Randall Memorial Park and perhaps the underground expansion of Lot 80. The engineering campus will cross N. Randall Avenue, with academics (S-26) as well as parking on the block bound by W. Dayton Street, N. Orchard Street, Spring Street, and N. Randall Street. No change in the Campus Development Plan Boundary is necessary to accommodate this revisioned engineering campus, but the university should purchase properties on the Dayton Street/Orchard Street/Spring Street/Randall Avenue block from willing sellers to accommodate these new facilities.

University Research Park and WARF have recently purchased the building at 1403 University Avenue and established WID@1403, offering co-working, networking, and mentoring opportunities. The 2015 Campus Master Plan Update recommends a new and larger facility on the same site (S-22), to allow the programming to expand.

A Police and Security Facility Addition (S-18), construction scheduled for 2017, will provide private and open office space, conference and training spaces for the department, as well as a secure sally port entrance to the existing detainee unloading area so that officers have a safe area to load and unload detainees into the holding area. A new officer education facility (S-30) will co-locate Aerospace Studies, Naval Science, and Military Science on Monroe Street. Relocating Naval Science enables S-21, and relocating Military Science enables W-20.

The Brogden Psychology Building will need to be removed and Physical Plant services will need to be consolidated and moved to the Lot 51 area to make way for the construction of the second phase of the Wisconsin Institutes of Discovery (S-03B). The Meiklejohn House and Lot 13 will be replaced by an Academic/Research Building (S-28).

To the south, on N. Orchard Street just south of the Atmospheric, Oceanic and Space Sciences Building, is currently the site of two former residence halls, the Rust-Schreiner Hall complex. These buildings, currently used as swing space for a variety of on campus units, will be an academic facility (S-08A). Further development in this block includes a planned museum addition to the Weeks Hall for Geological Sciences (S-08B) and a future academic/research facility along the north side of Spring Street (S-08C). The latter would require

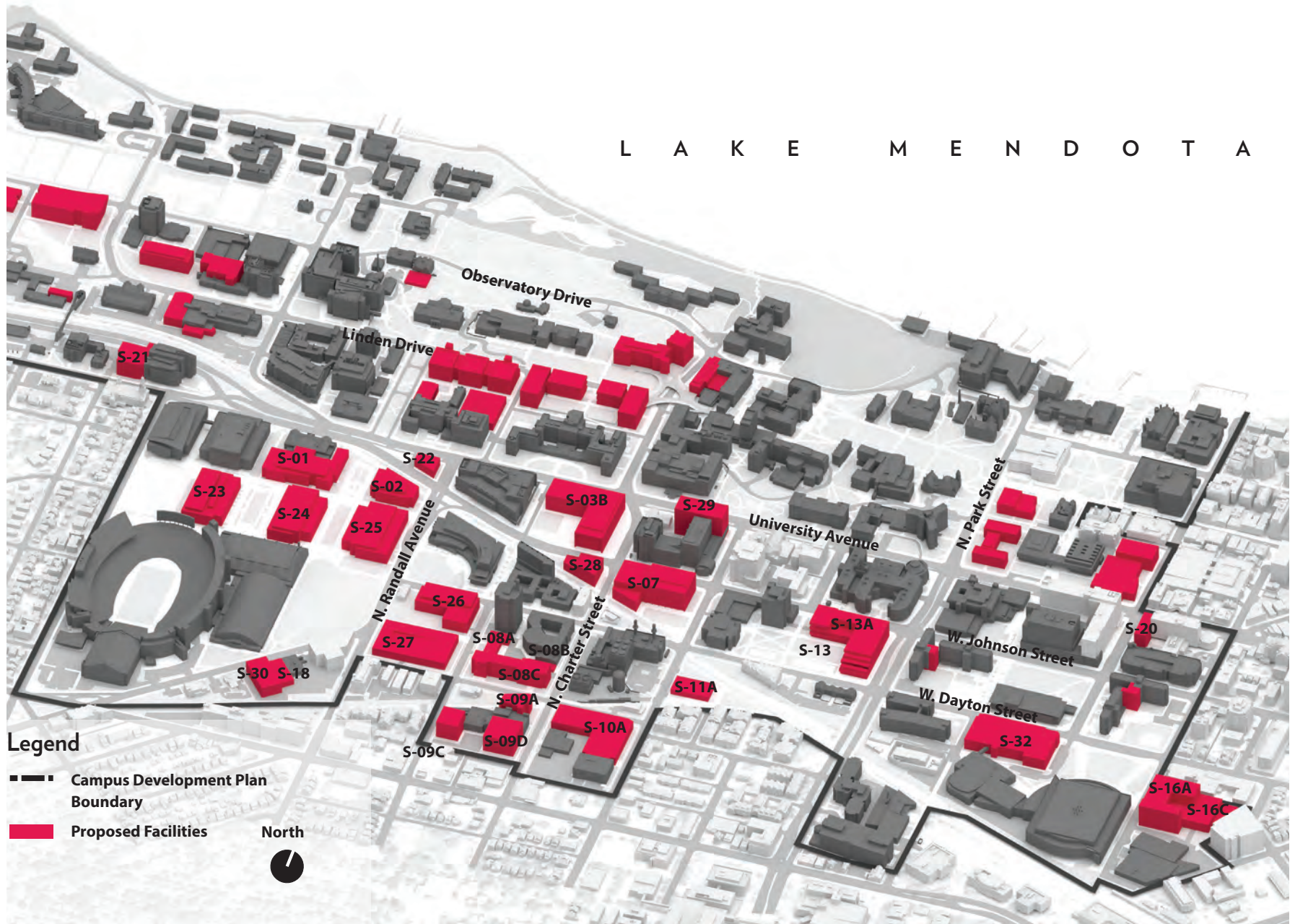


Figure 4-13 South Campus Building Key

4. FACILITIES PLAN: PROPOSED CONDITIONS

the acquisition of several privately owned parcels which the university would pursue on an as-offered basis. No current academic program expansion is driving the need to purchase these properties. They do however remain within the university's long range Campus Development Plan Boundary.

Further south lies the Primate Research facilities which have a planned consolidation and phased expansion of their facilities (S-09A, C and D).

To the east of this block, east of N. Charter Street, is Parking Lots 50 and 51, the 30 N. Mills Street facility, and the campus Fleet and Service Garage. The 2015 Campus Master Plan Update shows further development of this block for Physical Plant services, as outlined in the 1995 and 2005 Campus Master Plans. This development would include a 400-space parking ramp (S-10A). The development could possibly include small private retail space(s) on the first floor as well as some meter parking on the first floor of the parking garage for public use. Public parking in this garage could remove on-street parking from N. Charter Street, enabling for conversion of N. Charter Street to a two-way green street. The 2015 Campus Master Plan Update recommends an Academic Building on the Lot 45 site (S-11A), and that parking demand could also be accommodated in S-10A.

The 2015 Campus Master Plan Update recommends the total redevelopment of the Noland Hall and Zoology Research Building block (S-07) to replace these two buildings. They were built in 1972 and 1963 respectfully and both have outlasted their useful lives.

The Chemistry Instructional Addition (S-29) will be a 9-story tower that will address the Chemistry instructional program's anticipated space needs. The new tower will be constructed first, followed by the remodeling of the existing building.

The 2015 Campus Master Plan Update recommends an L-shaped Academic/Research Building (S-13A), fronting on N. Park Street and W. Johnson Street. A substantial new south-facing South Campus open space should be created, framed by S-13A, Educational Sciences, and Teacher Education. N. Brooks Street between W. Dayton Street and W. Johnson Street should be closed to unify the open space and facilitate pedestrian movements. The open space is located in a low portion of South Campus and should feature stormwater treatment facilities. The open space design and programming should support W. Dayton Street festival street programming. The open space will be a roof garden above an underground parking structure (S-13) with approximately 350 parking spaces that should be constructed under S-13A and the open space. The

university should continue to purchase the remaining privately owned parcels in this block.

The Fluno Center was designed to accommodate an addition (S-20).

The 2013 Recreational Sports Master Plan recommends the removal of the existing Southeast Recreational Facility (SERF) and reconstruction of a larger and re-programmed facility (S-32) on the same site. The building will serve the residents of the southeast residence hall neighborhood. It will be dedicated to Recreational Sports, other than sharing a 50-meter competition pool and separate diving well with the Division of Intercollegiate Athletics.

North of the Art Lofts on Lot 91, the 2015 Campus Master Plan Update recommends a mixed-use academic, parking, and utility facility. The Academic Building (S-16A) will be a major expansion of art instruction space in the southeast corner of campus, allowing for continued off loading of programs in the Mosse Humanities Building. A 375-space above-ground parking structure (S-16C) will replace Lot 91 and provide additional parking for Kohl Center events. Adjacent and perhaps integrated with the parking structure should be a new east campus chiller plant. The first floor of S-16A and S-16C should be open and elevated to provide access to a regional electrical line that is buried under Lot 91. The height of the building should be at or below the 10-story limit required by the City of Madison Downtown Plan, and siting and design should be coordinated with the 2-story 1939 Art Moderne Doyle Administration Building and the 10-story 2016 Uncommon residential tower. The existing Campus Development Plan Boundary passes diagonally through Lot 91; the 2015 Campus Master Plan Update recommends adjusting the Campus Development Plan Boundary to include the entire Lot 91 and planned site for S-16A and S-16C.



Figure 4-14 South Campus Illustration

4. FACILITIES PLAN: PROPOSED CONDITIONS

Table 4-1 Proposed Building Summary

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
Far West							
	W-29	Preserve Outreach Center	Service/Support	1	8,700	–	2023-2029
West							
	W-01	Wisconsin Institutes for Medical Research Phase 3	Health/Hospital	7	308,000	–	2029-2035
	W-02	Parking Structure (Hospital Ramp Addition)	Parking	3	323,900	1,225	2017-2023
	W-04A	Health Sciences Expansion	Health/Hospital	7	60,500	–	2035+
	W-05	McClimon Track/Soccer Grandstand	Athletics	3	78,000	–	2035+
	W-06	Social/Dining/Meeting Rooms/Health Sciences	Union/Student Center	5.5	126,800	–	2035+
	W-07	Health Sciences Research	Research	6	121,938	–	2035+
	W-08	Cooper Hall Addition	Academic	3	30,000	–	2035+
	W-09A	Parking Structure	Parking	6	504,000	1,500	2035+
	W-09B	Health Sciences Research	Research	5	233,250	–	2035+
	W-09C	Health Sciences Research	Research	5.5	231,000	–	2035+
	W-11	WARF Addition	Research	6	192,000	–	2035+
	W-12	Walnut Greenhouse II	Research	1	24,000	–	2017-2023
	W-13	Health Sciences Research	Research	5	164,185	–	2035+
	W-28	Nielsen Tennis Stadium Expansion	Athletics	2	47,075	–	2023-2029
	W-34	Grounds Office/Administration	Service/Support	1	3,000	–	2035+
	W-30	Grounds Storage A – Controlled Temp	Service/Support	1	3,000	–	2035+
	W-31	Grounds Storage B – Covered	Service/Support	1	–	–	2035+
	W-32	Grounds Greenhouse	Service/Support	1	6,000	–	2035+
	W-33	Grounds Storage C – Salt	Service/Support	1	3,500	–	2035+

Table 4-1 Proposed Building Summary (continued)

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
Near West							
	W-16	Gymnasium-Natatorium Replacement	Rec Sports	5	470,900	–	2017-2023
	W-17	Veterinary Medicine Expansion	Research	2	138,911	–	2017-2023
	W-18	Meat Science and Muscle Biology Lab	Academic/ Research	2	228,000	–	2017-2023
	W-19	Biological Systems Engineering	Academic/ Research	6	246,000	–	2035+
	W-20	Poultry & Livestock Lab Building	Academic/ Research	2	52,965	–	2029-2035
	W-22	Animal Sciences (AHABS)	Academic/ Research	5	85,000	–	2035+
	W-24	Plant Sciences	Academic/ Research	5	100,000	–	2035+
	W-25	Babcock Hall Center for Dairy Research Addition	Academic/ Research	3	31,300	–	2017-2023
	W-27	Parking Structure (Lot 62 Site)	Parking	5	198,000	625	2017-2023
Central							
	N-03A	Academic/Research (Van Hise site)	Academic/ Research	6	114,000	–	2035+
	N-03B	Academic/Research (Van Hise site)	Academic/ Research	8	48,000	–	2035+
	N-04	Academic/Research (Stovall Site)	Academic/ Research	6	82,200	–	2029-2035
	N-05A	Academic/Research (Nutritional Sciences site)	Academic/ Research	6	180,000	–	2035+
	N-05B	Academic/Research (Middleton site)	Academic/ Research	6	165,000	–	2035+
	N-05C	Parking Structure (Lot 20 Site)	Parking	5	144,000	375	2029-2035

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Table 4-1 Proposed Building Summary (continued)

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
	N-06A	Academic/Research (SMI Bardeen Med Sciences site)	Academic/Research	6	144,000	–	2029-2035
	N-06B	Parking Structure (Under N-05B & N-06A)	Parking	2	194,400	550	2029-2035
	N-07	Academic/Research (445 Henry site)	Academic/Research	3	30,000	–	2035+
	N-11A	Academic/Research (Mosse site north)	Academic/Research	4	84,000	–	2029-2035
	N-11B	Parking Structure (Under N-11A and N-12A)	Parking	2	162,000	450	2029-2035
	N-12A	Academic/Research (Mosse site south)	Academic/Research	5	135,000	–	2029-2035
	N-13B	Hamel Music Center P1&2	Academic	3	135,000	–	2017-2023
	N-13C	Music Phase 3	Academic	5	75,000	–	2029-2035
	N-14	Ingraham Hall Additions	Academic	4	56,000	–	2017-2023
	N-15	King Hall Greenhouse	Research	1	7,500	–	2035+
South							
	S-01	Engineering Research Building Replacement	Academic/Research	6	271,667	–	2029-2035
	S-02	Engineering Drive 1410 – Replacement	Academic/Research	6	169,091	–	2023-2029
	S-03B	Wisconsin Institute for Discovery, Phase 2	Research	6	392,000	–	2029-2035
	S-07	Zoology Research and Noland Hall	Academic/Research	8	419,888	–	2035+
	S-08A	Academic/Research	Academic/Research	2	22,000	–	2029-2035
	S-08B	Weeks Hall Addition	Research	1	5,000	–	2035+
	S-08C	Academic/Research (Spring St)	Academic/Research	6	150,000	–	2035+
	S-09A	Primate Center & Harlow Expansion	Research	6	48,822	–	2035+

Table 4-1 Proposed Building Summary (continued)

District	Map Reference	Building Name	Building Use	Number of Floors	Total Gross Square Feet	Parking Spaces	Phase
	S-09C	Primate Center & Harlow Expansion	Research	6	60,000	–	2035+
	S-09D	Primate Center & Harlow Expansion	Research	6	96,000	–	2035+
	S-10A	Parking Structure (Physical Plant)	Parking	4	148,800	400	2035+
	S-11A	Academic/Research (Lot 45 Site)	Academic/ Research	2	30,000	–	2035+
	S-13	Parking Structure (Under S-13A)	Parking	2	129,600	350	2017-2023
	S-13A	Academic/Research (Johnson/Park)	Academic/ Research	6	348,000	–	2017-2023
	S-16A	Art Building	Academic/ Research	3	162,000	–	2035+
	S-16C	Parking Structure	Parking	2	108,000	375	2035+
	S-18	Police Addition	Academic	2	24,840	–	2017-2023
	S-20	Fluno Addition	Other	6	43,200	–	2035+
	S-21	College of Engineering Research Building	Research	7	156,364	–	2017-2023
	S-22	University Research Park (Lorch St)	Other	4	34,000	–	2035+
	S-23	New Engineering	Academic/ Research	5	204,000	–	2035+
	S-24	New Engineering	Academic/ Research	5	236,583	–	2035+
	S-25	New Engineering	Academic/ Research	5	274,986	–	2035+
	S-26	New Engineering	Academic/ Research	5	169,506	–	2035+
	S-27	Parking Structure (Engineering)	Parking	6	345,600	1,050	2035+
	S-28	Academic/Research (Meiklejohn Site)	Academic/ Research	5	84,470	–	2029-2035
	S-29	Chemistry Bldg Expansion	Academic/ Research	9	173,169	–	2017-2023
	S-30	Officer Education Facility	Academic	4	65,000	–	2017-2023
	S-31	Southeast Recreational Facility	Rec Sports	4	253,000	–	2017-2023

4.5 Open Space and Landscape Plan

The overall campus plan is the summation of planning and design by an interdisciplinary team, in collaboration with Facilities Planning & Management staff and university stakeholders.

The plan is conceptual, illustrating campuswide improvements based upon the principles established and the landscape concepts presented above. This plan is not a final destination, but a guiding illustration that envisions what campus could look like.

Recommended Improvements:

- 1 A revitalized Willow Creek corridor
- 2 A dedicated campus arrival for the School of Veterinary Medicine
- 3 New Near West Commons open space, adaptively re-purposing the historic Horse Barn
- 4 Expanded naturalized and working landscapes on Observatory Hill
- 5 An iconic pedestrian bridge at the intersection of N. Charter Street and Linden Drive
- 6 A boardwalk to safely traverse the steep slope behind Sewell Social Sciences Building
- 7 The creation of new campus open spaces through the redevelopment of the Medical Sciences and Humanities
- 8 Improved visitor gateway experience along University Avenue and W. Johnson Street
- 9 Green Street initiatives along N. Charter and W. Dayton Streets
- 10 A new South Campus quad at Educational Sciences



Figure 4-15 Proposed Landscape Project Locations

Table 4-2 Proposed Landscape Summary

Map Reference ¹	Category of Open Space Use	Location Description	New ²	Comments	Phase
OS-W-01	Courts/Quads/Gardens	Pharmacy East Quad		Green space directly east of Pharmacy, connect to West Union	4
OS-W-02	Natural Areas	1918 Marsh Improvements		Shoreline, walking path, landscape improvements	2
OS-W-03	Courts/Quads/Gardens	West Union North Green	*	Includes stormwater management component	4
OS-W-04	Courts/Quads/Gardens	West Union Terrace	*	Area immediately surrounding the Union West Building	4
OS-W-05	Pedestrian Mall	Walnut Street Pedestrian Mall		Enhanced streetscape	4
OS-W-06	Natural Areas	Picnic Point Entry Improvements		Alignment, signage, landscape improvements	2
OS-W-07A	Natural Areas	Willow Creek Improvements-South	*	Between Linden Drive and Campus Drive	2
OS-W-07B	Natural Areas	Willow Creek Improvements-Middle	*	Between Observatory Drive and Linden Drive	1
OS-W-07C	Natural Areas	Willow Creek Improvements-North	*	Between Lake and Observatory Drive	4
OS-W-08	Streetscape	Linden Drive between Willow Creek and Elm Dr.	*	Stormwater management, green streets	3
OS-W-09	Courts/Quads/Gardens	Horse Barn Stormwater Facility	*	Restore greenspace around Horse Barn	4
OS-W-10	Recreation	Near East Recreation Fields/Stormwater	*	Underground stormwater facility	1
OS-W-11	Courts/Quads/Gardens	Westside Terrace and Plaza	*	Area adjacent to west side of new Natatorium	1
OS-N-01	Streetscape	Observatory Drive Streetscape	*	Part of Utility Upgrade projects, remove parallel parking/pull-out addition. Between Babcock and Charter.	4
OS-N-02	Courts/Quads/Gardens	Tripp/Adams Hall Courtyards	*	Restoration	2
OS-N-03	Streetscape	Linden Drive Pedestrian Enhancements		Enhanced pedestrian zone	3
OS-N-04	Natural Areas	Removal and Redevelopment of Lot 34		Stormwater, education, research facility	3
OS-N-05	General Openspace	Observatory Hill Landscape Restoration		Reduced lawn conversion, tree thinning/planting	3
OS-N-06	General Openspace	Pedestrian Land Bridge	*	Over intersection of Charter and Linden	3
OS-N-07	General Openspace	N. Charter Street Lake Terminus Path	*	Transition down slope	1
OS-N-08	Streetscape	Observatory Drive Pedestrian Improvements		At Bascom/Social Science/Ingraham area	1
OS-N-09	Court/Quads/Gardens	Super Block Roof Deck	*	Area around N-06A site	3
1. Format: Open Space - Planning District - ID#					
2. New Recommendation, relative to 2005 Campus Master Plan					

Table 4-2 Proposed Landscape Summary, continued

Map Reference ¹	Category of Open Space Use	Location Description	New ²	Comments	Phase
OS-N-10	Stormwater	Underground Treatment Stormwater Facility	*	Green infrastructure, superblock adjacent to Medical Sciences	3
OS-N-11	General Openspace	Bascom Hill Stormwater Landscape	*	Reduce lawn, implement green infrastructure	2
OS-N-12	Courts/Quads/Gardens	Library Mall (State Street to Langdon Street)		Redevelopment of Library Mall	2
OS-N-13	Courts/Quads/Gardens	Humanities Site Mall	*	Connecting East Campus Mall to N. Park Street (Lathrop)	3
OS-N-14	Streetscape	Campus Gateway Entry Sign	*	At Campus Drive/University Avenue center median	2
OS-S-01	Courts/Quads/Gardens	Engineering Campus Mall	*	Connection between Engineering. Mall and Camp Randall Park	4
OS-S-02	Recreation	Camp Randall North Practice Field	*	Minor addition	1
OS-S-03	Courts/Quads/Gardens	Union South Quadrangle & Open Space		Removal of Wendt Library (relocate)	4
OS-S-04	Courts/Quads/Gardens	Block South of Union South	*	Stormwater component	4
OS-S-05	Courts/Quads/Gardens	Campus/Orchard Surface Stormwater Facility	*	WID II, South Open Space	3
OS-S-06	Courts/Quads/Gardens	N. Mills Surface Stormwater Facility	*	Nolan Zoology Block Quadrangle	4
OS-S-07A	Streetscape	Dayton Street Green Infrastructure-Randall to Charter	*	Green street	1,2,3,4
OS-S-07B	Streetscape	Dayton Street Green Infrastructure-Charter to Park	*	Green street	1,2,3,4
OS-S-07C	Streetscape	Dayton Street Green Infrastructure-Park to Francis	*	Green street	1,2,3,4
OS-S-08	General Openspace	Witte Hall Yard	*	Open space improvements, stormwater	1
OS-S-09	General Openspace	Sellery Hall Yard	*	Open space improvements, stormwater	2
OS-S-10	Courts/Quads/Gardens	Grainger Hall Courtyard Redevelopment		Redo existing	2
OS-S-11	Streetscape	University Avenue Streetscape Enhancements		Incoordination with City/State/Fed's	4
OS-S-12	General Openspace	Railroad R/W Landscape Enhancement	*	Lessen visual impact of this corridor	2
OS-S-13	General Openspace	Art Building open space & sculpture garden		Art Building development	4
OS-S-14	Streetscape	Campus Gateway Entry Sign		At 21 N. Park Street island	3
OS-S-15	Courts/Quads/Gardens	South Campus Quad	*	Area north of W. Dayton Street, Brooks St. Ped Mall	2
1. Format: Open Space - Planning District - ID#					
2. New Recommendation, relative to 2005 Campus Master Plan					

4.6 Natural Campus Landscapes

Observatory Hill

Observatory Hill is a sacred, historic landscape. It is one of the few remaining large open spaces in Central Campus and its view of Lake Mendota and Picnic Point are treasured by all.

Even before the campus located Washburn Observatory on the apex of the drumlin, this landscape was utilized for thousands of years. Native Americans built effigy mounds atop the hill which visually connected to mound groups at Willow Drive, Picnic Point and across Lake Mendota. Centuries later, the university terraced the hill and built an orchard; the remnants are still visible. Today, the landscape has become a pass-through space that has lost much of its prominence. Beyond winter sledding, the hillside gets little active and dedicated use.

Observatory Hill is a landscape steeped in history worthy of preservation. Despite its revered status, opportunities exist to revitalize this open space, strengthening its connection to the lake while providing both restorative and didactic environments for students and staff.

Recommendations

- Relocate Lot 34 and on-street parking along Observatory Drive to improve the view to Lake Mendota. Provide temporary parking for visitors to access the lookout and Elizabeth Waters Residence Hall.
- In place of Lot 34, construct a naturalized wetland feature to manage stormwater from Observatory Hill and Tripp Hall. Incorporate boardwalks for strolling, teaching, research and accessing the water. Seating nooks for social gathering or quiet reflection will help students and visitors reengage with this landscape.
- Convert traditional lawn areas to a designed oak savanna ecosystem with large copses of oak trees and short-grass prairie plants. This naturalistic landscape will require less frequent maintenance, provide wildlife habitat, and act as a teaching landscape. A more appropriately sized lawn will be retained adjacent to Elizabeth Waters Residence Hall as open space.
- Reroute and improve the connections for ridge line pathways south of the effigy mounds and restore the mound landscape to short-grass prairie per the Indian Mound Management Policy (May 2011) in consultation with Facilities Planning & Management staff.



Figure 4-15 Observatory Hill Proposed Section



Figure 4-16 Observatory Hill Proposed Plan

Linden Drive and Willow Creek

The agricultural campus started as a series of experimental farming plots and open spaces. Today, it has expanded, matured, and developed into a modern research campus, losing much of its original agrarian character. It has turned its back on Willow Creek, an urban creek that is the only tributary to Lake Mendota on campus.

The character of Willow Creek has changed substantially since the establishment of the agricultural campus. What once was a meandering creek with natural hydrologic flows, it is now channelized and receives stormwater discharge from nearly 1,400 acres of urban development upstream. The creek is at the level of Lake Mendota, experiences extreme fluctuations in flow and is depositing significant amounts of sediment into University Bay, creating sand bars and further altering the hydrologic conditions and lake limnology.

As this district of campus is poised for redevelopment, incredible opportunity exists to create a new campus vernacular of working landscapes and a revitalized creek, rooted in the agricultural and natural history of the area.

Recommendations – Willow Creek

- Restore the riparian zone by providing an expanded vegetative buffer to manage non-point source pollution and stabilize the steps. The removal of Easterday Lane will provide much needed green space for rain gardens to manage stormwater, cleansing and slowly releasing it to Willow Creek.
- Construct wetlands to manage stormwater and provide habitat. Perched wetlands along the west side of the creek will intercept stormwater runoff from the grounds service yard prior to it entering the creek. Provide boardwalks with interpretive signage to educate visitors.
- Provide a multi-use pathway connecting the Campus Drive Bike Path to the Howard Temin Lakeshore Path.
- Activate Willow Creek with linear terraces stepping down to the water's edge, allowing students to engage with and access the creek. Create outdoor terraces providing direct access from the Veterinary Medicine north building expansion and new Natatorium.

Recommendations – Linden Drive

- Create working landscapes such as rain gardens throughout the agricultural campus to sustainably manage stormwater and brand the Near West Campus as the “Green District.” Link the features hydrologically conveying rain water west toward Willow Creek.
- Create a dedicated School of Veterinary Medicine entry sequence along Linden Drive, converting Easterday Lane to green space.
- Create a Near West Commons at the Horse Barn, restoring the historic open space that was the western terminus of the Linden Mall. Adaptively re-purpose the Horse Barn, providing programming to activate the anchor building of the new space. Provide a terrace west of the Horse Barn that reinterprets the footprint of the original animal pens. Maintain the visual connection to the Dairy Barn.

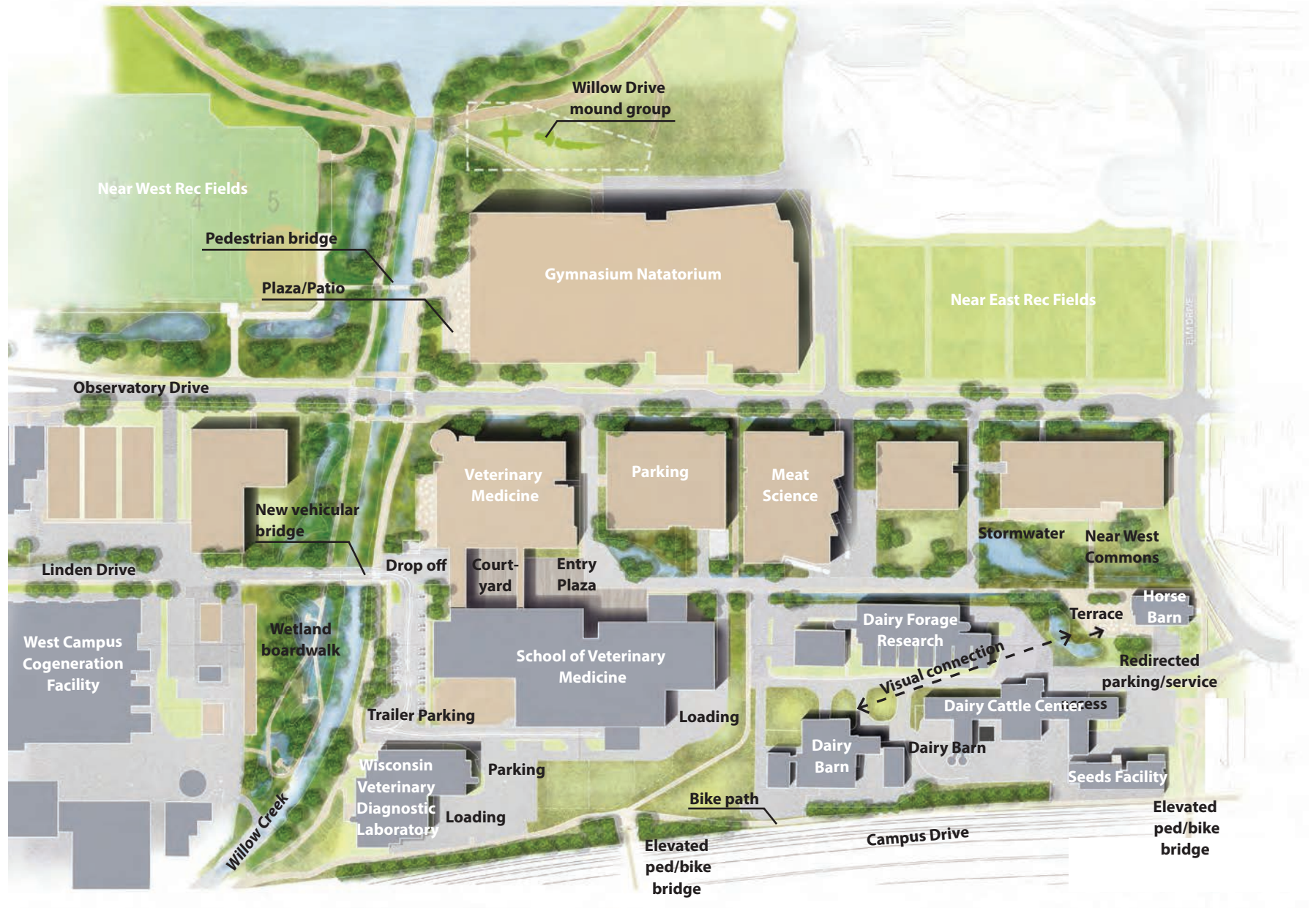


Figure 4-17 Willow Creek and Linden Drive Plan

4. FACILITIES PLAN: PROPOSED CONDITIONS



**Existing – Looking North on
Observatory Drive**



Figure 4-18 Revitalized Willow Creek Corridor

N. Charter Street at Sewell Social Sciences

The north terminus of N. Charter Street is an opportunity to connect the busiest intersections on campus with natural serenity of the lakeshore. The pathway to the lakefront has great potential, the walk within the forested canopy is serene and provides a sense of mystery on the trip down to the water. Due to the slope, the existing path becomes steep and dangerous during the winter. It also channels stormwater flowing from the parking area, resulting in excessive soil erosion along the slopes.

Recommendations

- Demarcate the pedestrian spaces and reinforce the crossings. Visually connect N. Charter Street with the trailhead to the lakefront path. Clearly mark signage to make crossings easier and safer for pedestrians.
- Construct a boardwalk that navigates the steep slopes safely, without further disturbing the ecosystem. Re-route stormwater from the upper slope to avoid rill and gully erosion.
- Use materials of long-lasting durability and low-maintenance, such as steel with slip-resistant metal gratings.
- Create a new overlook that terminates the axis with secluded views of Lake Mendota. Link the vernacular of the boardwalks and overlooks to create a seamless experience.
- The creation of the boardwalk would result in reduced bicycle accessibility to the Howard Temin Lakeshore Path, forcing cyclists to enter further west at the Lakeshore Residence Halls or east at N. Park Street



Figure 4-19 Lake Access Boardwalk Proposed Section

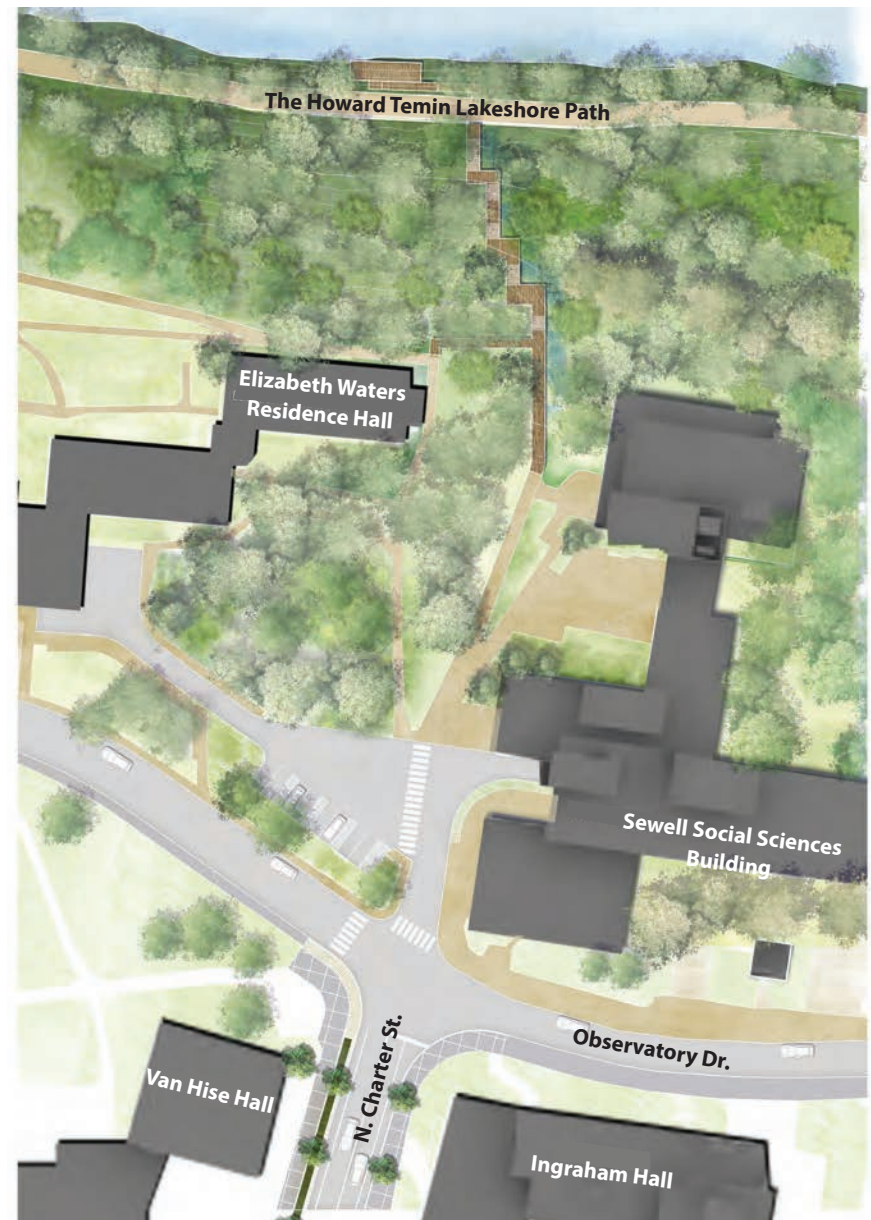


Figure 4-20 Lake Access Boardwalk Proposed Plan

4.7 Social Campus Landscapes

South Campus Quad

The 2015 Campus Master Plan Update proposes the creation of a new quad space on South Campus. The space lies between N. Park Street and N. Mills Street, and is bordered by W. Johnson Street and W. Dayton Street to the south.

This new quad addresses the vital need for open space in the South Campus. Beyond general use space, it provides an outdoor room that will help define a sense of place for this district. The quad opens up to the south, which will warm the space in spring and fall, and help block the winter winds.

The quad will be enclosed by Education Sciences and a new academic program building to the east. With the closure of N. Brooks Street between W. Johnson Street and W. Dayton Street, the space will be reinforced as a pedestrian corridor.

The plaza will be a key node along the W. Dayton Street athletics corridor that links Camp Randall with the Kohl Center. The flexible space will provide additional game day programming for students and alumni alike.



Figure 4-21 Existing Housing Units along N. Brooks Street

Recommendations:

- Create a ‘quad’ of civic scale and character. The simple design will withstand heavy pedestrian traffic. The layout makes programming the space flexible for large and small events. Large lawn panels lined with trees will be reminiscent of larger campus malls and provide a soft, collegiate feel for informal social gatherings. Diagonal paths cut through the space along desire lines between entries and exits. Trees wrap the space and define the rooms, providing a human scale to the surrounding architecture (see Figure 4-22).
- Reinforce north-south pedestrian movement by creating a tree-lined pedestrian mall. The axis will create a pleasant corridor defining the rooms within the quad, while terminating the viewshed on the historic campus to the north.
- Introduce green infrastructure to manage stormwater on site. The site propitiously coincides with a low point in the terrain and intercepts the storm sewer line in the Brooks Street right-of-way, making it an ideal location for an urban stormwater feature to illustrate green infrastructure on campus. The rain garden ponds replace traditional fountains, providing the noise mitigation and calming effects while treating and managing the sites stormwater.
- A terrace connecting to the west facade of the new academic building provides space to have outdoor classes, socialize with friends or study exam material. This corner gathering space is off the main axis to avoid blocking traffic, while engaging the building and providing a space for groups to congregate.
- Redevelop Dayton Street as a “green street” pilot project. As with N. Charter Street, implement the design guidelines outlined in the streetscape typologies to give W. Dayton Street a clear landscape identity linking Camp Randall Memorial Park, Union South, the South Quad and the Kohl Center along one unified “athletic” streetscape experience.
- Provide pedestrian scale lighting to animate the area at all times of the day, particularly during the short days of the winter months.
- Design the quad lawn such that it can endure significant usage, for example through the incorporation of fiber reinforced soils.



Figure 4-22 Proposed South Campus Quad



Existing – Looking east on W. Dayton Street at N. Brooks Street



Figure 4-23 South Campus Quad and W. Dayton Street Green Street

4.8 Green Streets

Some of the highest concentrations of polluted runoff in urban areas comes from streets and the UW–Madison campus is no exception. With surface parking lots becoming increasingly more rare, the primary source of sediment loading from campus will be streets, roads, and driveways. Green Streets are an effective approach to managing runoff from high-pollutant load areas while offering aesthetic and educational value. Essentially green practices are integrated into the streetscape whether they be rain garden planters, permeable pavements, or suspended pavement root enhancement systems (like Silva Cells) which allow urban street trees to grow to their full potential and provide stormwater detention and treatment as well.



Figure 4-24 Green Street, West Union, Iowa



Figure 4-25 Green Street, Normal, Illinois

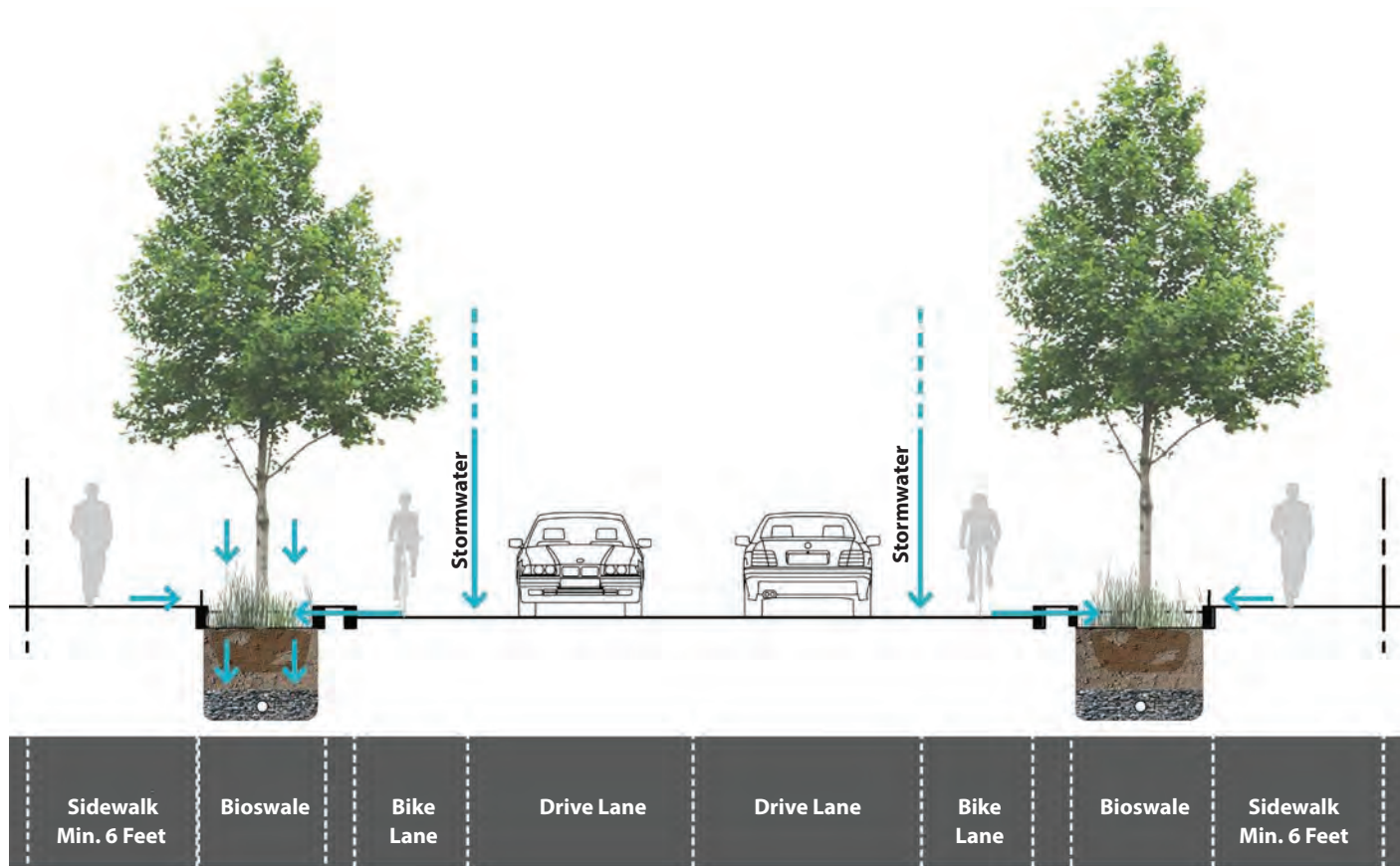


Figure 4-26 Example Green Street Cross Section

4.9 Proposed Green Infrastructure and Stormwater Management

UW–Madison is already a leader in sustainable stormwater practices, having implemented dozens of progressive practices from green roofs to wetlands throughout the 936-acre campus. However, increased sustainability awareness by students, faculty, staff, and the general public, as well as a more stringent regulatory climate, offer opportunities for UW–Madison to step up and be even more aggressive in greening its facilities. The 2015 Campus Master Plan Update offers both opportunities for enhancing green infrastructure and challenges as the campus continues to densify and space for stormwater management is balanced with other programmatic needs.

Within the context of green infrastructure and stormwater management planning, the primary goal of the UW–Madison Campus Stormwater Management Plan is to identify green infrastructure opportunities so that they can be appropriately budgeted and accommodated during site planning. A secondary goal is to identify and quantify possible impacts (both positive and negative) of proposed building, open space, parking, and roadway changes on stormwater runoff so that appropriate land use decisions can be made or measures incorporated to address potential adverse impacts.

Through this master planning process, there were three primary goals identified for green infrastructure on campus:

- Implement stormwater practices and policies that contribute to a healthy Yahara Lakes system.
- Integrate research and learning into the campus stormwater management approach.
- Connect campus stormwater management to the wider Yahara Lakes watershed community.

Recommendations to achieve these goals fall under a multi-tiered approach. First, practices were identified which could be implemented in areas where a large multi-site runoff tributary could be collected and treated to maximum benefits for every dollar spent. Second, a menu of site-specific best management practices and the outcomes they are intended to achieve (such as volume reduction, total suspended solids capture, groundwater recharge, etc.) are

described which should be implemented as redevelopment occurs block by block based on an overall subwatershed plan. Third, campus stormwater standards should be updated to ensure that all new redevelopment projects on campus are contributing in a positive way towards overall sustainability and green infrastructure goals. Fourth, we encourage the continuation of good housekeeping practices on campus including street sweeping, snow and leaf litter collection, and diversion and isolation of waste areas to keep runoff from campus as clean as possible.

The above recommendations are all physical modifications or policy adoptions that will help UW–Madison maintain a strong leadership role in green infrastructure and work towards permit requirements and other sustainability goals such as ecological awareness of the community and serving as a living laboratory. In addition, UW–Madison is participating in water quality initiatives outside of campus which contribute to a healthy watershed. Adaptive Management in the Yahara Lakes watershed is a program that includes dozens of municipalities and other governmental agencies to target urban and non-urban sources of sediment and phosphorus in the watershed. The long-term goal is to achieve water quality standards in the Yahara Lakes for fishable and swimmable lakes, which will ultimately benefit the university as a major landholder along Lake Mendota.

A significant amount of technical analysis went into studying the existing campus conditions and charting a course for the future of green infrastructure on campus. The companion document Green Infrastructure & Stormwater Management Master Plan contains the technical background and detailed recommendations regarding green infrastructure and stormwater management on campus.

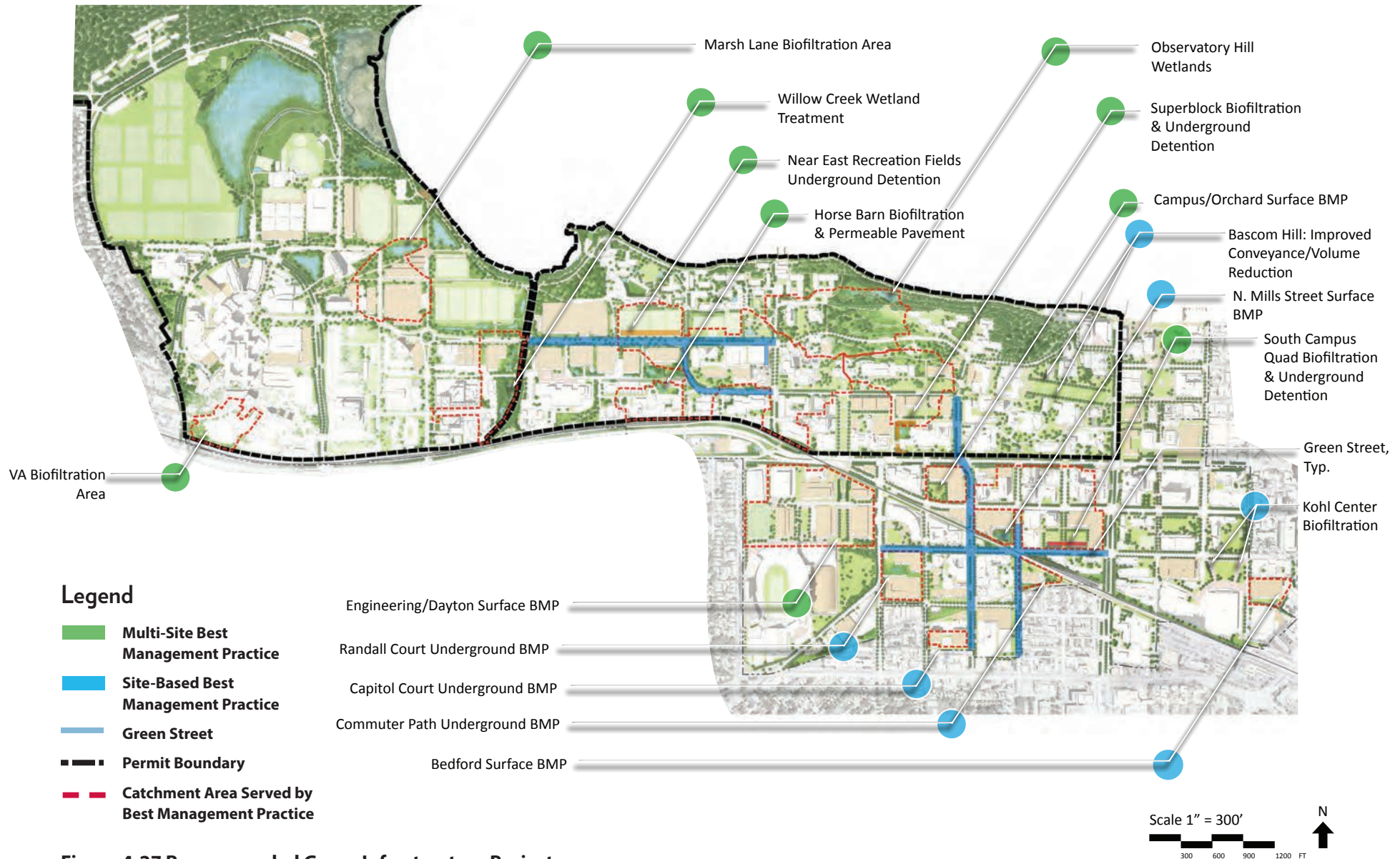


Figure 4-27 Recommended Green Infrastructure Projects

4.10 Proposed Pedestrian and Bicycle Circulation

Walking and biking are fundamental and widespread forms of transportation on campus throughout the year, and the university places a high priority on providing connected and comfortable facilities for pedestrians and cyclists. Moving forward, the following should be priorities for enhancing the campus walking and biking experience:

N. Charter Street and Linden Drive

Intersections recommended for improvement were identified based on input from UW–Madison and city staff and the public. The highest priority intersection is N. Charter Street and Linden Drive. This intersection is at the center of campus with several primary academic and research locations in the area, including Van Hise, Human Ecology, Van Vleck, Bascom Hall, Sterling Hall, and others.

People, mopeds, buses, bicycles, and cars all converge at this intersection. During class change, pedestrian volumes rival pedestrian traffic on the streets of New York City. This causes delays in the transit system, which ripple through the remaining day's schedule. At peak class change times, Metro Transit buses and motor vehicles experience delay at this location waiting for the large numbers of pedestrians and cyclists to clear the intersection. This delay has a lasting effect on the overall performance of the Metro Transit routes traveling through this area.

Coupled with steep topography from Bascom and Observatory Hills, this intersection creates extremely challenging conditions. The university should take advantage of the steep topography and construct a pedestrian plaza/bridge over the intersection. This separated level would capitalize on existing topography and tie into upper levels of future buildings to be built/redeveloped in this area.

Grade separation would provide a continuous connection for pedestrians from the entrance of Van Vleck to the future building in the southwest corner of the intersection as well as the upper plinth of Van Hise (and any new building on the site) and the sidewalk parallel to Linden Drive connecting west to Human Ecology. Removing pedestrians from the street level will reduce intersection

transit delay. Motor vehicles, transit users, and cyclists would travel at the existing street level. By linking into future new and redeveloped buildings at the intersection, the vertical circulation would be made primarily through the buildings. Street access would be provided along the east side of N. Charter Street to and from the grade separated area.

Recommendations

- Build a pedestrian bridge that establishes a new primary pedestrian level connecting from Van Vleck to Van Hise. To be successful, the bridge must feel like the natural choice for students. Using the unique topography, the bridge crossing will be easier than current pathways. Separating pedestrians from vehicular traffic will alleviate traffic congestion, mitigate multimodal conflicts, and improve pedestrian experience.
- Build an iconic bridge. The bridge will be at the eastern terminus of the Linden “Greater” Mall and therefore is a tremendous opportunity to create an architectural icon. Unlike a particular building that only a small portion of the campus may use, this bridge will be used by a large campus cross section.
- Create a destination through the incorporation of planting and seating. The bridge creates a new opportunity that currently does not exist, to create space that accommodates the traffic flow while providing flex space for people to congregate. The bridge will conceptually extend the Linden Mall up toward Bascom Hill connecting two spaces that were previously divided. The bridge design should be such as not to hinder both anticipated and unanticipated programming.
- Provide an open and airy structure. The bridge should incorporate skylights and openings to provide adequate daylight to travelers below. Lighting should be incorporated for safety and to highlight architectural features.

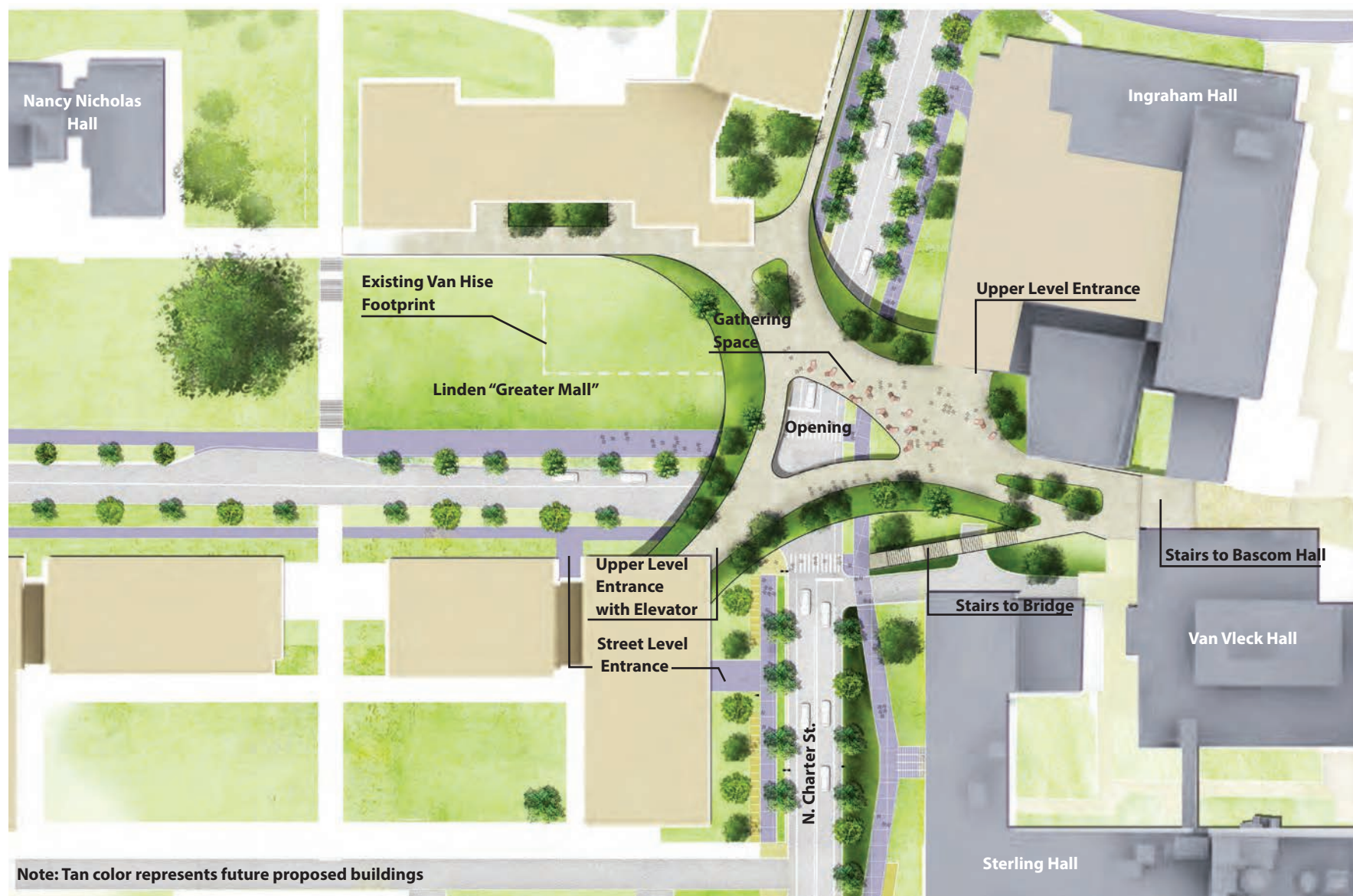


Figure 4-28 N. Charter Street At Linden Drive Pedestrian Bridge

4. FACILITIES PLAN: PROPOSED CONDITIONS



Existing – Looking north on N. Charter Street



Figure 4-29 Pedestrian Bridge Over N. Charter Street and Linden Drive

Other Intersections

Additional intersections are identified in Figure 4-33 with blue circles. High volumes of pedestrians and cyclists travel through these intersections and around campus every day, and the comfort and connectivity of their travel should be continuously promoted and improved. Each of these intersections has its own unique challenges caused by intersection geometry. These include motor vehicle speed, volume, and turning movements, intersection visibility, pedestrian and cyclist volumes, and other factors.

Pedestrians and cyclists should be offered a direct, convenient, and highly visible shortest path crossing at these intersections. Non-motorized crossings should be given an adequate signal phase time and intersections with high-volumes of pedestrians and cyclists should include a protected pedestrian-only (and in some cases a bicycle-specific/bicycle-only) signal phase to facilitate crossings.

Other potential improvements to be applied to these intersections include:

- Pedestrian-leading intervals
- Curb extensions/bump-outs
- Median pedestrian refuge islands
- High-visibility continental crosswalks
- Bike boxes
- Green paint demarcating the path of bicycles through the intersection

Gaps in the Campus Walking and Biking Network

The 2015 Campus Master Plan Update recommends completing the identified gaps in the campus biking network to intra-campus travel, as well as commuting to and from campus. Figure 4-34 displays the recommended walking and biking connections to address known gaps. This plan recommends the following improvements to the overall connectivity of non-motorized travel:

- Install pedestrian routes through redeveloped area around existing Lot 60 in West Campus.
- Develop off-street shared-use path along the east side of Willow Creek.
- Construct off-street shared-use path along Campus Drive connecting Campus Drive Bike Path to Babcock Drive. This requires the partial or complete removal of the existing Meat Science and Muscle Biology Laboratory that currently encroaches on the railroad right-of-way. This plan proposes redevelopment of this building, which will allow for path extension.
- Install a two-cycle track on the south-side of University Avenue.
- Convert N. Charter Street from W. Dayton Street to Regent Street from one-way to two-way and add on-street bicycle lanes in each direction.
- Install on-street bicycle facilities on N. Mills Street.
- Increase pedestrian connectivity with pedestrian-only walking routes on the West Campus, across the N. Charter Street/Linden Drive intersection, and through the reconfigured central block area south of Linden Drive and west of N. Charter Street.
- Convert N. Brooks Street to a pedestrian mall between W. Dayton Street and W. Johnson Street and pedestrian routes through the redeveloped block bounded by W. Dayton Street, W. Johnson Street, N. Park Street, and N. Mills Street.
- Create grade separation linking the west side of Bascom Hill with Van Hise and the upper sidewalk north of and parallel to Linden Drive.

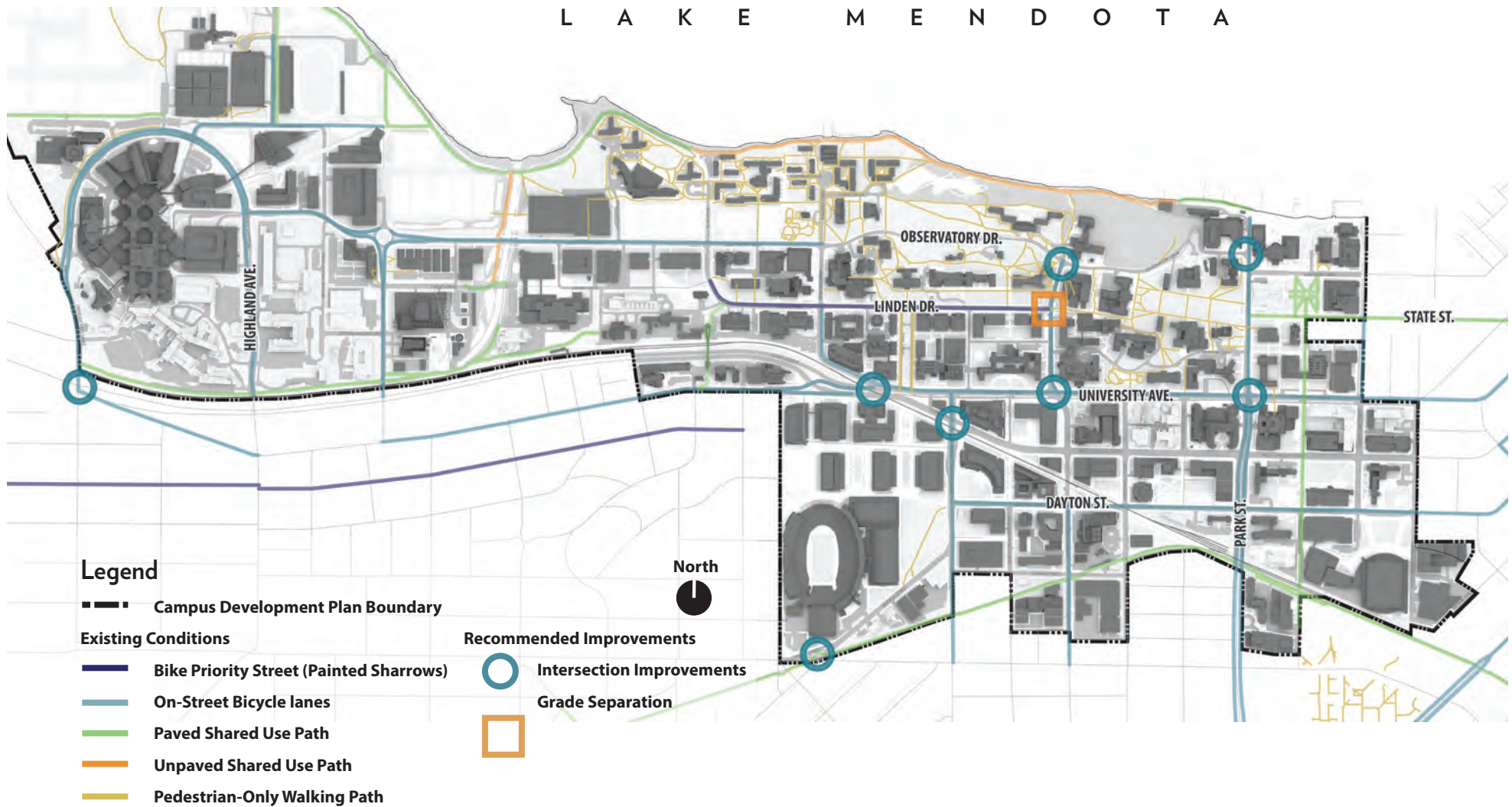


Figure 4-30 Locations of Recommended Intersection Improvements

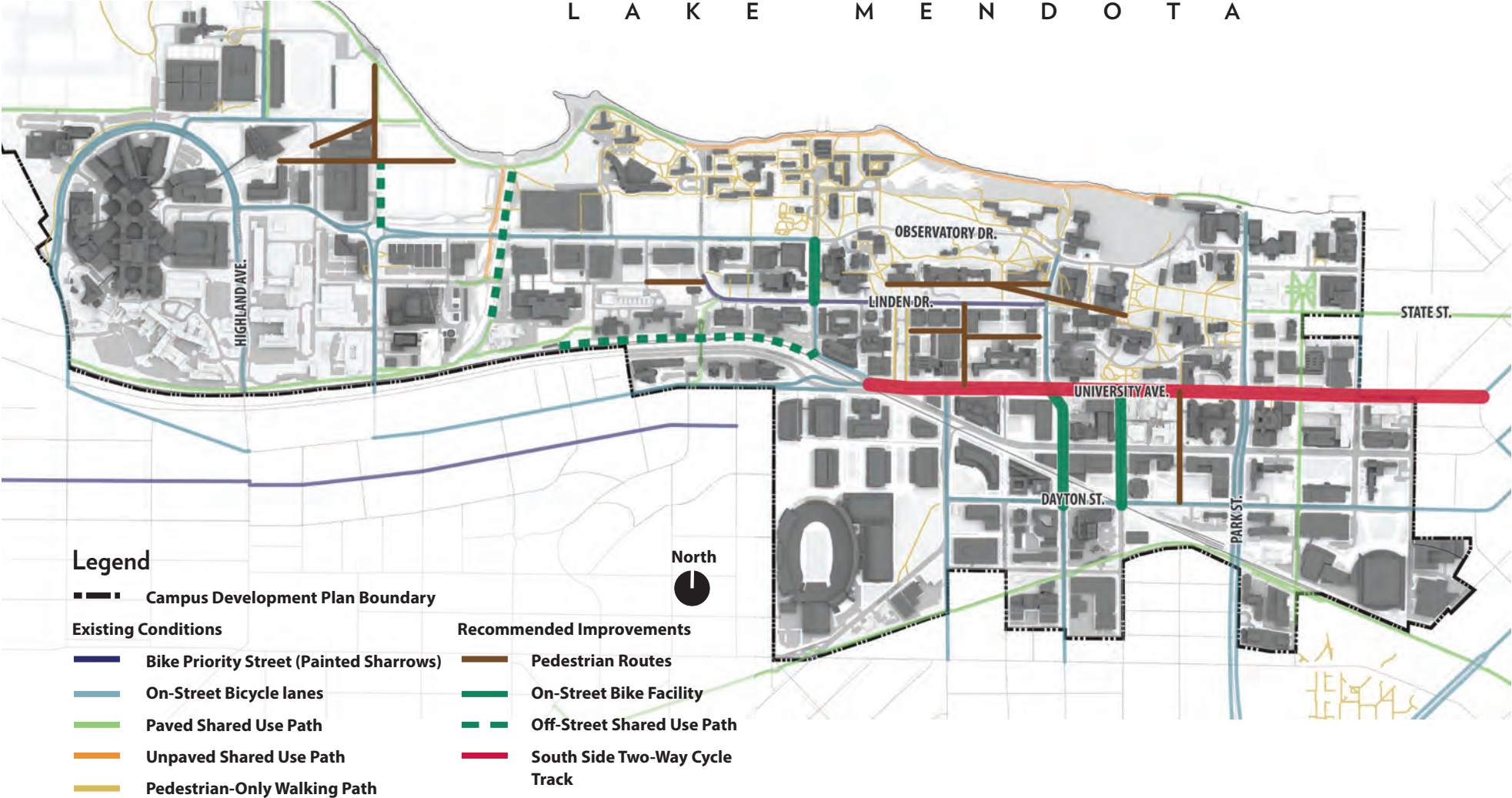


Figure 4-31 Recommended Walking and Biking Improvements

4.11 Proposed Transit, Parking Vehicular Circulation

Motor Vehicle Access and Circulation

Facilitating motor vehicle connectivity to and around campus is essential to the long-term vitality of the campus, particularly as buildings and parking are removed, added, and redeveloped. Thousands of faculty, staff, employees, visitors, freight, and service vehicles travel to and around campus each day. As shown in Figure 4-35, the following modifications to the road network will promote access and circulation in response to proposed land use changes:

- Vacate parts of Marsh Drive, Willow Drive, and Walnut Street; install a new north-south road from Marsh Drive to Observatory Drive to accommodate planned land uses.
- Vacate Easterday Lane and add an east-west connection across Willow Creek.
- Install new north-south access drive from University Avenue to Linden Drive, west of N. Charter Street.
- Install new east-west parallel access road south of Linden Drive, west of N. Charter Street.
- Install a protected left turn phase for N. Charter Street southbound vehicles turning left on to W. Johnson Street.
- Convert N. Brooks Street from W. Johnson Street to W. Dayton Street, into pedestrian mall/shared emergency drive.
- Convert N. Charter Street from W. Dayton Street to Regent Street, from one-way to two-way and add on-street bicycle lanes in each direction.

Vacate Easterday Lane and Add Willow Creek Crossing

In conjunction with the construction of the expansion of Veterinary Medicine, it is recommended that Easterday Lane between Linden Drive and Observatory Drive be vacated. This street does not serve significant transportation purposes and its vacation enables site and stormwater planning opportunities. Vacation of Easterday Lane creates options for engaging Willow Creek as a functional space. This plan also recommends an extension of Linden Drive across Willow Creek south of and parallel to Observatory Drive. These new connections provide access to the current and proposed veterinary medicine buildings, and provide additional emergency access over Willow Creek in the event other routes become impassable.

Manage Building Development and Added Parking Capacity in the Central Campus

Install New Access Drives

Building and parking additions and reductions are planned in the Central Campus between University Avenue and Linden Drive, and N. Charter Street and Henry Mall. In conjunction with these changes, this plan recommends two access roads to be created:

- Parallel to and west of N. Charter Street between Linden Drive and University Avenue
- From N. Charter Street west into the block, parallel to Linden Drive

These access roads will provide vehicular access from inside the block into the proposed buildings and added parking in this location. The roads also will provide increased fine-grain pedestrian and bicycle connectivity through this area. Pedestrians will be prioritized along with motor vehicles accessing parking and loading docks along these access roads. Cyclists will be encouraged to remain on Linden Drive. Transit routes will remain on Linden Drive and N. Charter Street as this is where peak transit demand is in Central Campus.

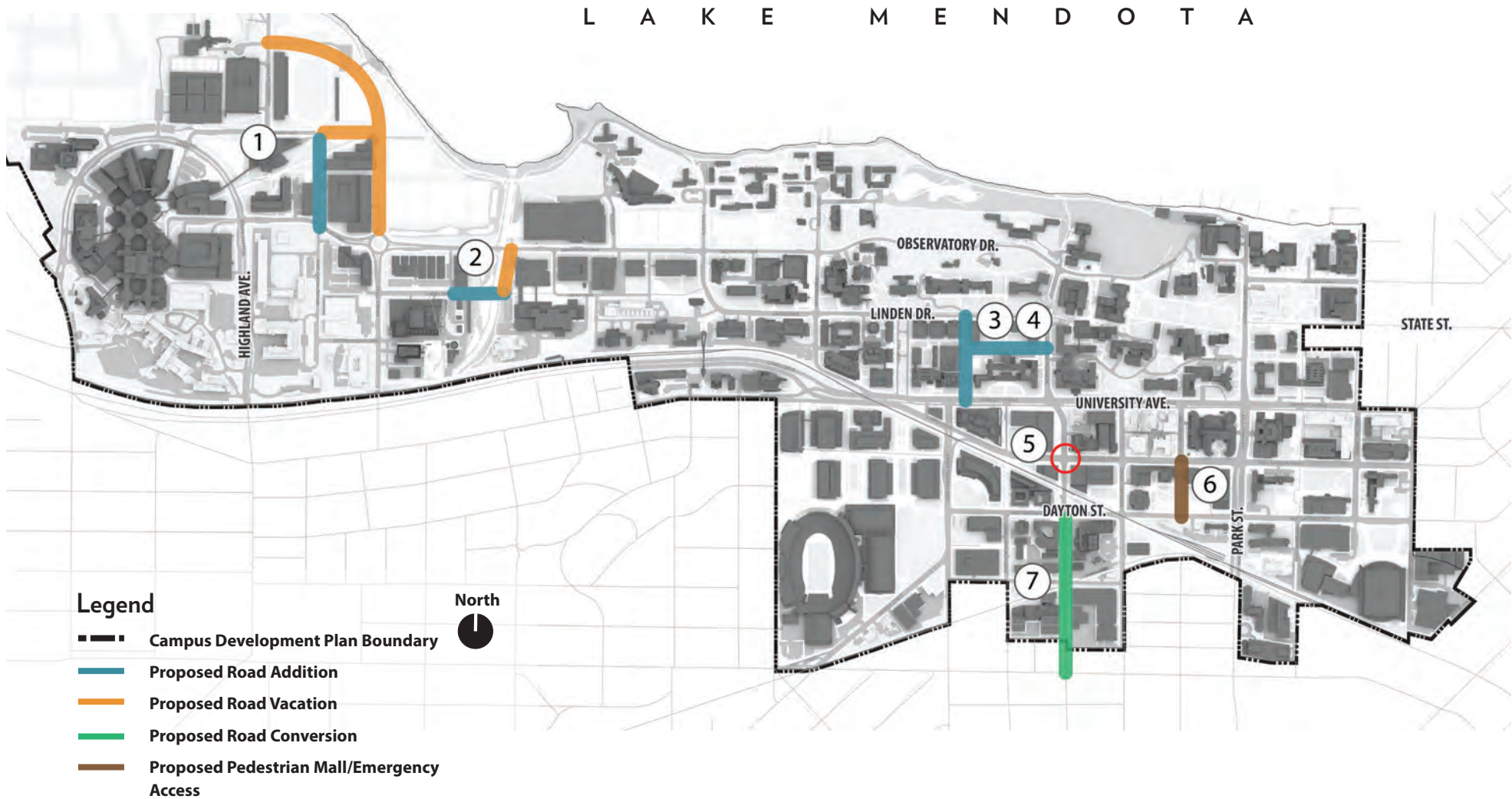


Figure 4-32 Proposed Road Additions, Vacations, and Conversions

Accommodate Additional Traffic

Additional building square footage and parking capacity in the Central Campus will bring added traffic on N. Charter Street and University Avenue. Much of the traffic from the development in this area will desire to turn left onto W. Johnson Street from southbound N. Charter Street. This plan recommends a short, protected, leading left turn phase from southbound N. Charter Street to eastbound W. Johnson Street. This would be in addition to the current permissive left turn phase. A protected left turn phase will provide additional capacity for turning movements without negatively affecting the intersection of Park Street and W. Johnson Street (the key intersection in the area).

Convert N. Brooks Street from W. Johnson Street to W. Dayton Street into Pedestrian Mall/Shared Emergency Drive

In conjunction with future building redevelopment at this block, this plan recommends converting N. Brooks Street from W. Johnson Street to W. Dayton Street into a pedestrian mall/shared emergency access drive.

Convert N. Charter Street from W. Dayton Street to Regent Street

This plan recommends converting N. Charter Street from W. Dayton Street to Regent Street from a northbound one-way street (with a southbound contra-flow bicycle lane and on-street parking) to a two-way with minimum 5-foot bicycle lanes in each direction. This recommendation serves to establish N. Charter Street an attractive multimodal gateway from South Campus and provides a connection through the center of campus all the way to Lake Mendota. These modifications require removal of on-street parking from the east side of N. Charter Street. There is sufficient nearby public street and university parking to make up for removal of parking along N. Charter Street.

Parking Operations and Management

The effective operation and management of parking at UW–Madison is paramount to the long-term success of the university and quality of life on campus. The university strives to continue to be a national leader in parking management, the provision of low parking ratios, and a comprehensive and complementary set of alternative commuter solutions. The university also recognizes the importance of providing available and accessible parking spaces for campus visitors and employees.

Future Parking Needs

Future parking needs were modeled under the planned future campus land use scenario. Approximately 900,000 square feet of new programmable building space is planned for West Campus compared to the existing condition. Additional parking supply is recommended for all campus districts to meet demand. Analysis indicates an overall future campus parking deficit of just 18 faculty/staff parking spaces as a result of the development programmed in the 2015 Campus Master Plan Update. Analysis was used to modify and finalize the proposed land use development and redevelopment build-out scenario.

Recommendations

This plan presents several recommendations for the university to effectively and efficiently provide and manage parking in conjunction with this Master Plan's proposed campus development and redevelopment.

- Continue to be leaders in transportation demand management (TDM) and alternative commuter solutions.
- Maintain parking ratios for faculty and staff. Work to shift UW Hospital employee parking demand off campus.
- Strategically add parking supply in conjunction with planned land use changes to continue to provide enough available and convenient parking to support the university's academic, research, and outreach missions.
- Add approximately 2,000 parking spaces over the next 20-40 years for visitors and provide swing space to accommodate parking phasing and construction.

Where possible, remove surface parking lots and consolidate parking supply into centrally located parking structures to allow for green space and campus development, increase parking efficiency, and improve water quality by reducing the amount of impermeable surfaces on campus.

Recommended Parking Additions and Reductions

This plan recommends the addition of approximately 2,000 parking spaces for visitors and to provide swing space over the next 20-40 years. Additional parking is needed to serve development phasing. New parking needs to be built before current parking lots are taken off line to accommodate the future building projects. In addition to providing construction swing space, the additional parking spaces will serve our campus visitors. Visitor parking demand is typically during off-peak hours. Roadways in West Campus and across campus are sized to meet peak demand levels. No significant traffic impacts on local roads during peak or off-peak periods are anticipated due to the recommended increase in visitor parking supply.

This plan recommends an addition of 6,380 and removal of 4,320 parking spaces, for a net increase of 2,060 parking spaces over the next 20-40 years to accommodate the planned build-out. Recommended parking additions and reductions are depicted in Figure 4-36 and Figure 4-37. Additions and reductions result in the following increases by district:

- West Campus: +689 spaces
- Near West Campus: +81 spaces
- Central Campus: +675 spaces
- South Campus: +615 spaces

Parking spaces will be consistently monitored to assure the campus is not overbuilding its parking supply based on current and future parking demands. With the continual improvements in public transit options and latest technologies in autonomous vehicles, it is clear that transportation to, from, and within campus will continue to evolve.

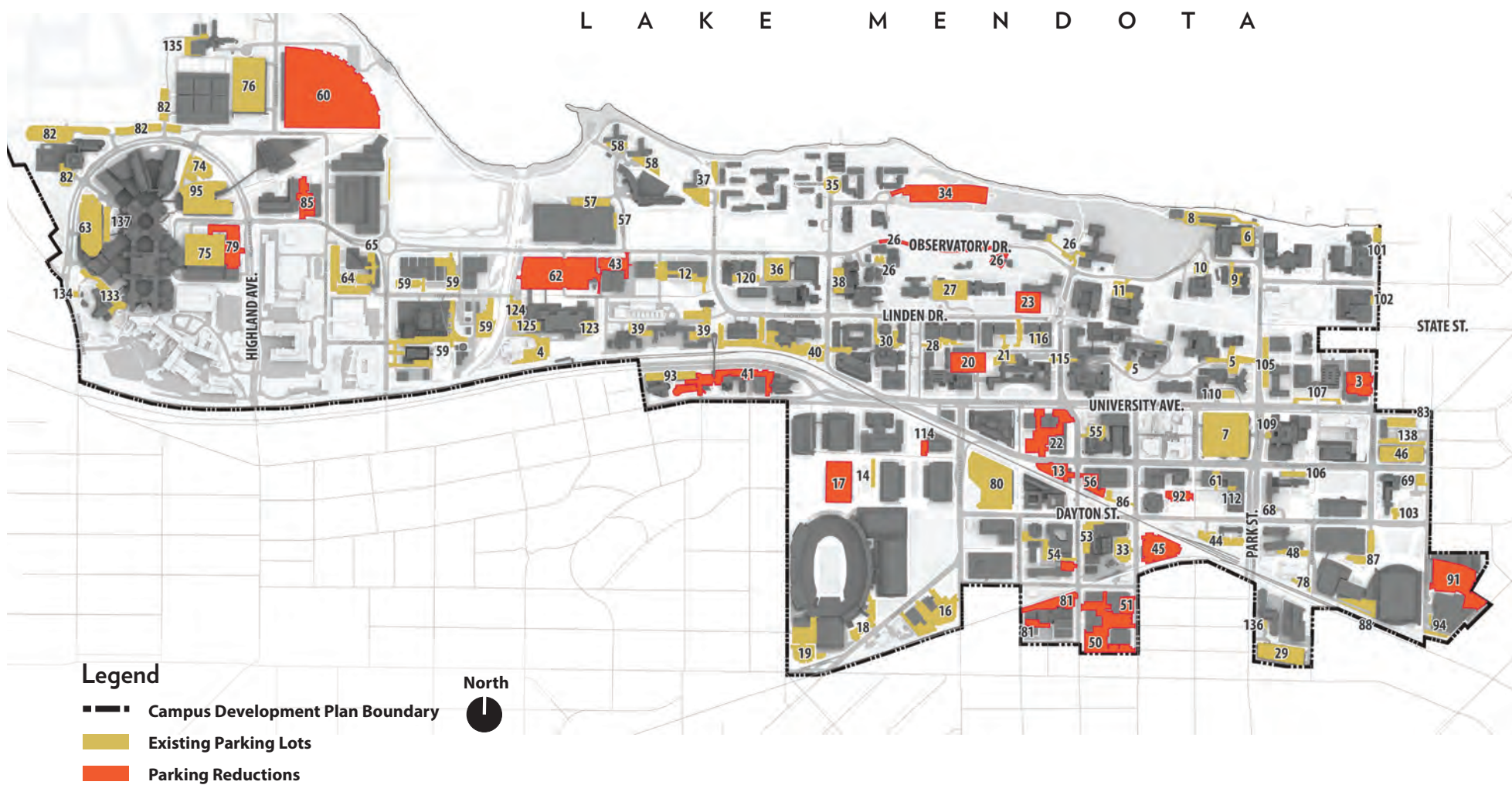


Figure 4-33 Recommended Parking Reductions

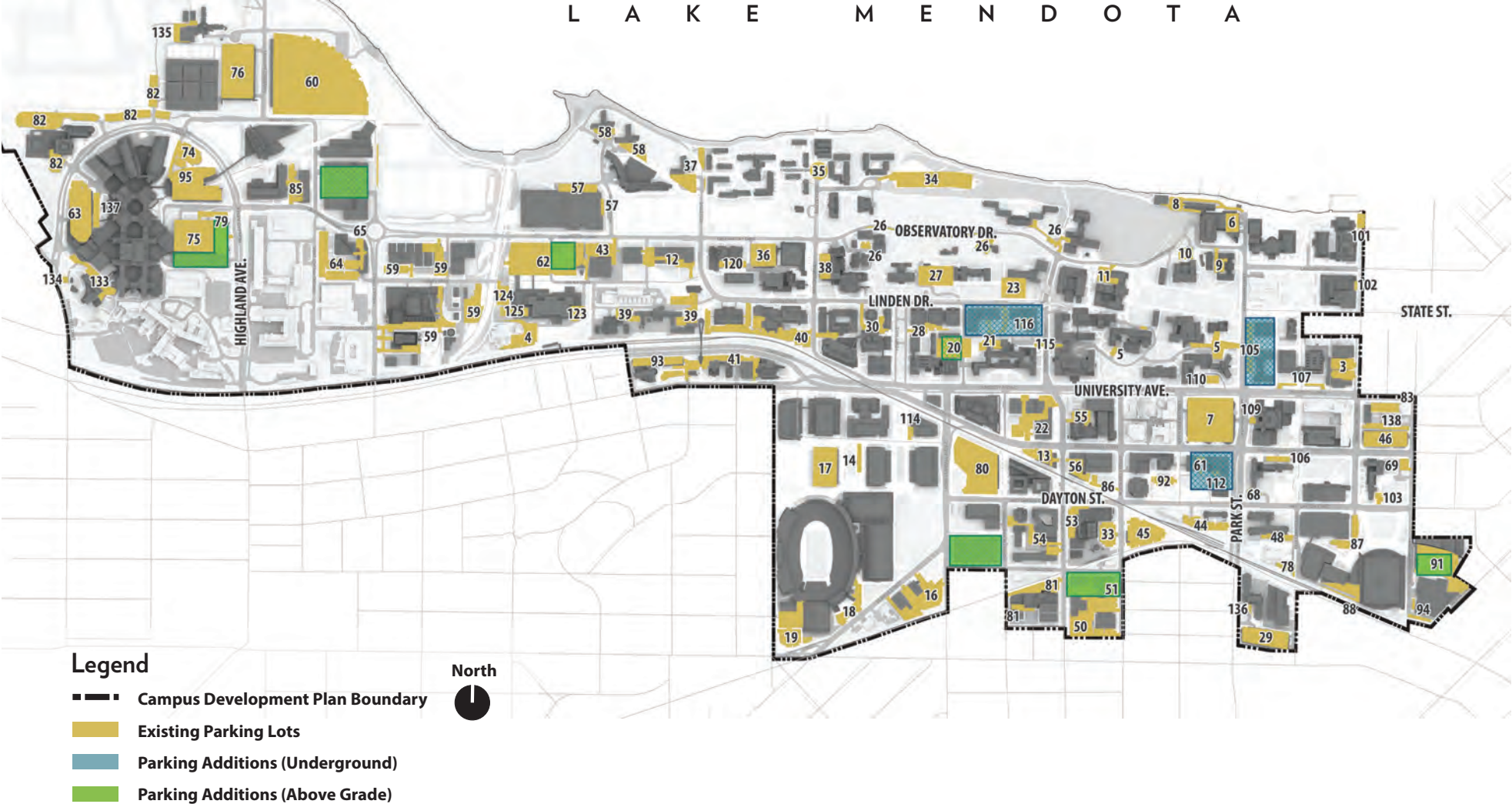


Figure 4-34 Recommended Parking Additions



5. PROPOSED PROJECT PHASING

5.1 Project Phasing

In order for a master plan to be successful, it must be appropriately phased and implemented over time. To assist with this process, the following initial draft phasing breakdown has been developed. Note that the proposed project opportunities listed are not a definitive comprehensive list of projects in any priority order and in no way suggests that these projects will be approved as part of the standard capital budget process with the State of Wisconsin. Each project will need to be reviewed and prioritized within the context of the 6-year capital plan and within a 2-year biennial capital budget. Projects are strictly initiated first by programmatic need and second by funding availability. Some projects may move between phases as funding becomes available. Some may move more quickly and others may move more slowly.

Tables 5-1 through 5-4 list building projects. See the following supporting master plans for descriptions of other recommended projects:

- Landscape Master Plan
- Green Infrastructure & Stormwater Management Master Plan
- Long Range Transportation Plan
- Utility Master Plan

Parking structures (above and below ground) are not included in building space subtotals.

Table 5-1 Phase 1 – 2017 to 2023 Near Term Improvements

Proposed Removal			
	ID	Name	GSF
West	0122	Greenhouse-Walnut Street	47,007
	0091	Linden Drive 1645	3,210
Near West	0119	Seeds Building	17,744
	0129	University Avenue 1610	24,589
	0031	Gymnasium-Natatorium	249,579
	0103	Linden Drive 1910	11,267
South	0028	Southeast Recreational Facility	191,254
	1095	Monroe Street 1433	12,515
	0578	Davis Residence Hall, Susan B	11,967
	0577	Bayliss Co-Op, Zoe	11,603
	0788	Brooks Street N 209	5,363
	1082	Bernard Court 206	3,734
	1060	Brooks Street N 215-217	3,733
Total Building Space Removed			593,565

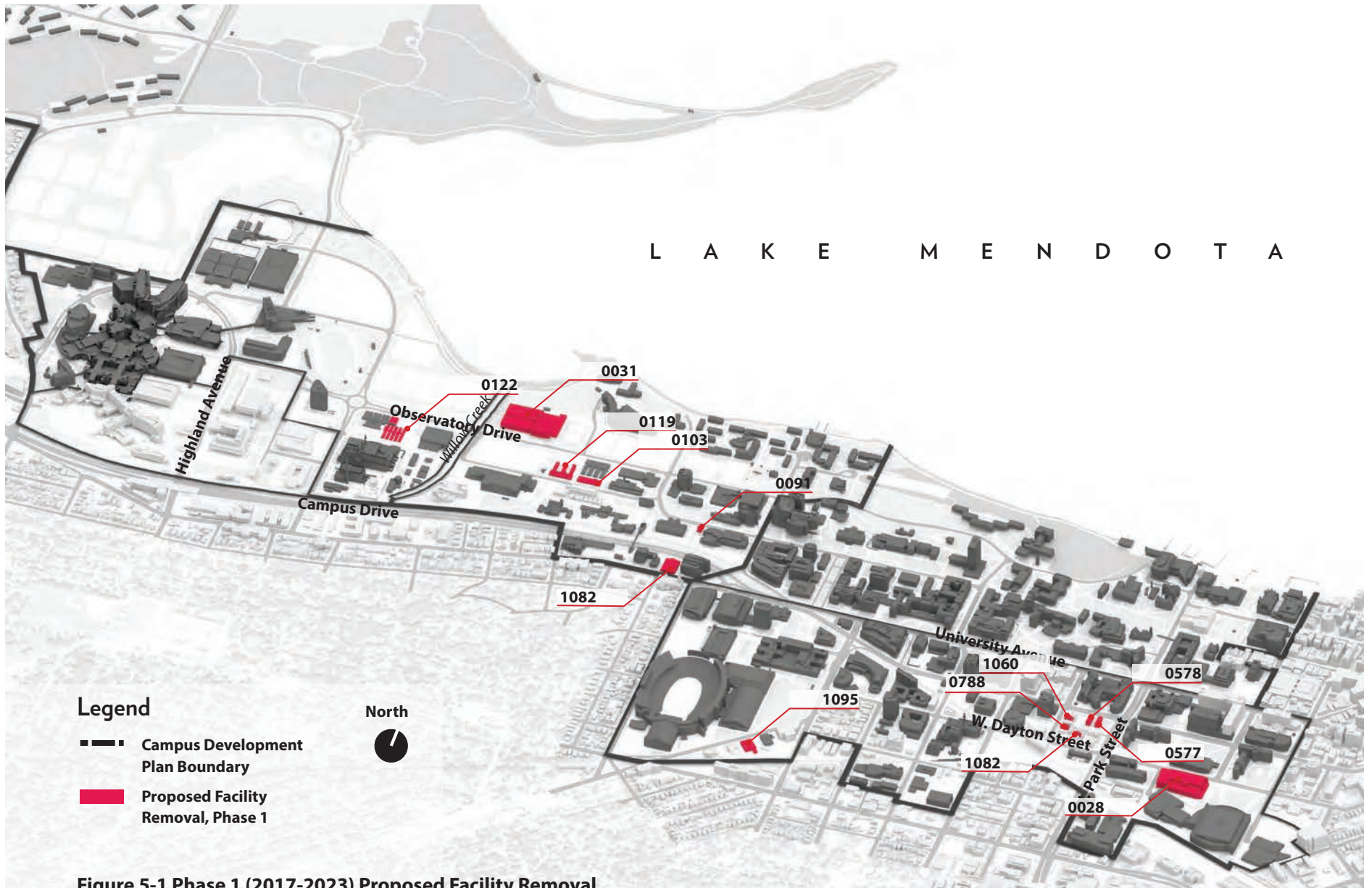


Figure 5-1 Phase 1 (2017-2023) Proposed Facility Removal

Table 5-1 Phase 1 – 2017 to 2023 Near Term Improvements, continued

Proposed Construction			
	ID	Name	GSF
West	W-12	Walnut Greenhouse II*	24,000
	W-16	Gymnasium-Natatorium Replacement	470,900
Near West	W-17	Veterinary Medicine Expansion	138,911
	W-18	Meat Science and Muscle Biology Lab*	228,000
	W-25	Babcock Hall Center for Dairy Research Addition*	31,300
Central	N-13B	Hamel Music Center P1&2*	135,000
	N-14	Ingraham Hall Additions	56,000
South	S-13A	Academic/Research (Johnson/Park)*	348,000
	S-18	Police Addition*	24,840
	S-21	College of Engineering Research Building	156,364
	S-29	Chemistry Building Expansion*	173,169
	S-30	Officer Education Facility*	65,000
	S-31	Southeast Recreational Facility*	253,000
Total Building Space Gained			2,104,484
	W-02	Parking Structure (Hospital Ramp Addition)*	323,900
	W-27	Parking Structure (Lot 62 Site)*	198,000
	S-13	Parking Structure (Under S-13A)*	129,600

* Project currently in planning, design, or construction as of August 2016.

Phase 1 – 2017 to 2023 Near Term Improvements

Total Building Space Removed	593,565
Total Building Space Gained	2,104,484
Phase 1 Total Net Change	1,510,919

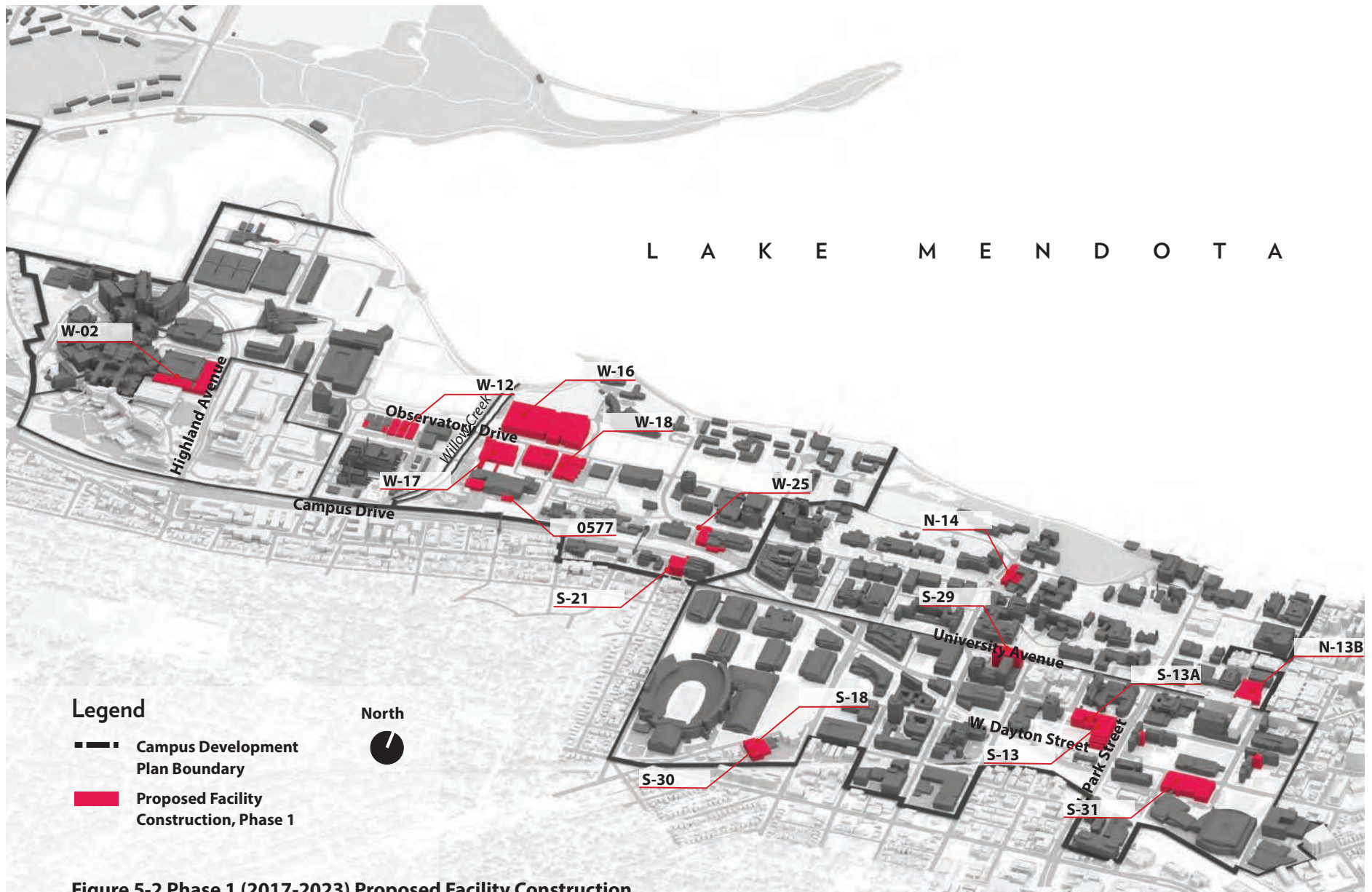


Table 5-2 Phase 2 – 2023 to 2029 Mid-Term Improvements

Proposed Removal			
	ID	Name	GSF
Near West	0116	Schuman Shelter, Carl	960
Central	0476	Stovall Building, William D-Hygiene Lab	80,939
South	0470	Psychology Building, Brogden	115,071
	0486	Engineering Drive 1410	63,561
	0530	Service Building	51,066
	0534	Service Building Annex	38,356
Total Building Space Removed			349,953

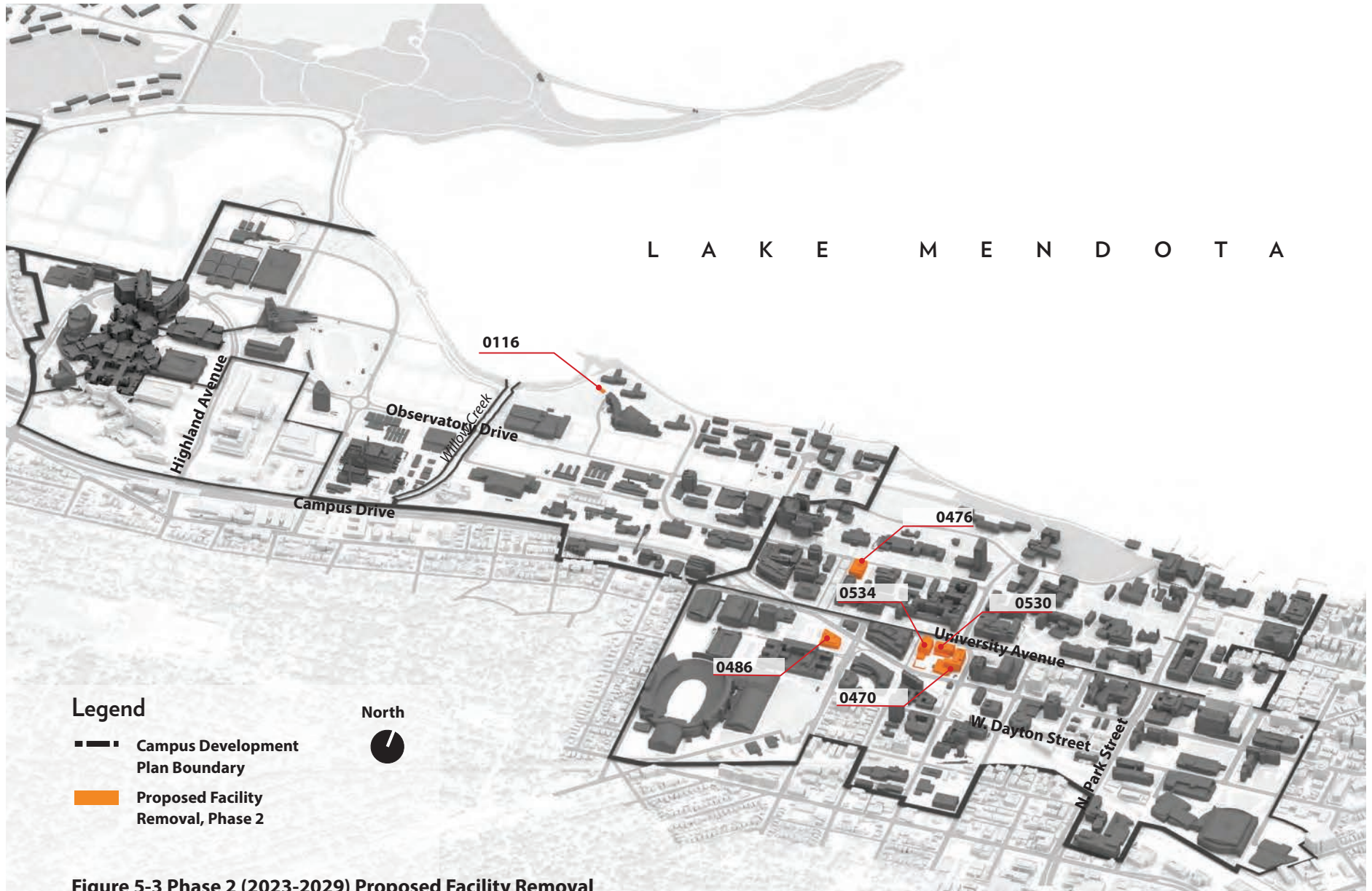


Figure 5-3 Phase 2 (2023-2029) Proposed Facility Removal

Table 5-2 Phase 2 – 2023 to 2029 Mid-Term Improvements (continued)

Proposed Construction			
	ID	Name	GSF
Far West	W-29	Preserve Outreach Center	8,700
West	W-28	Nielsen Tennis Stadium Expansion	47,075
South	S-02	Engineering Drive 1410 – Replacement	169,091
Total Building Space Gained			224,866

Phase 2 – 2023 to 2029 Mid-Term Improvements

Total Building Space Removed	349,953
Total Building Space Gained	224,866
Phase 2 Total Net Change	(125,087)

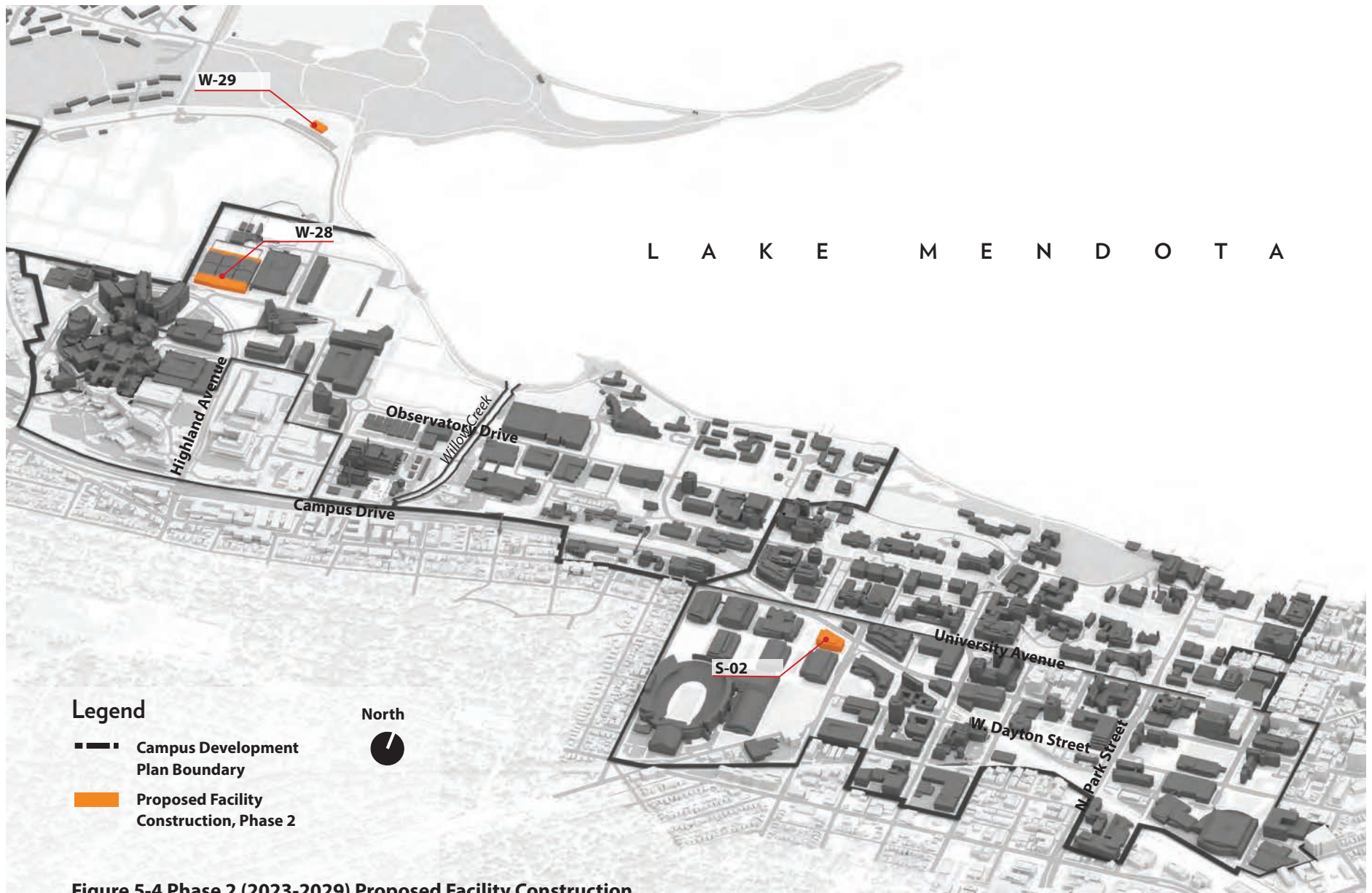


Figure 5-4 Phase 2 (2023-2029) Proposed Facility Construction

Table 5-3 Phase 3 – 2029 to 2035 Long Term Improvements

Proposed Removal			
	ID	Name	GSF
Near West	0110	Poultry Research Laboratory	24,013
	0115	Livestock Laboratory	35,267
Central	0500	Extension Building	76,318
	0452	Bradley Memorial Building	20,598
	0455	Middleton Building, William S	45,217
	0469	Humanities Building, Mosse, George L	333,363
	0451A	Service Memorial Institute	122,474
	0451B	Bardeen Medical Laboratories	69,344
	0451C	Medical Sciences	72,499
	0468	McArdle Building	96,657
South	0762	Engineering Research Building	157,510
	0158	Rust, Henry & Schreiner, David Hall	21,142
	0035	Meiklejohn House	5,955
Total Building Space Removed			1,080,357

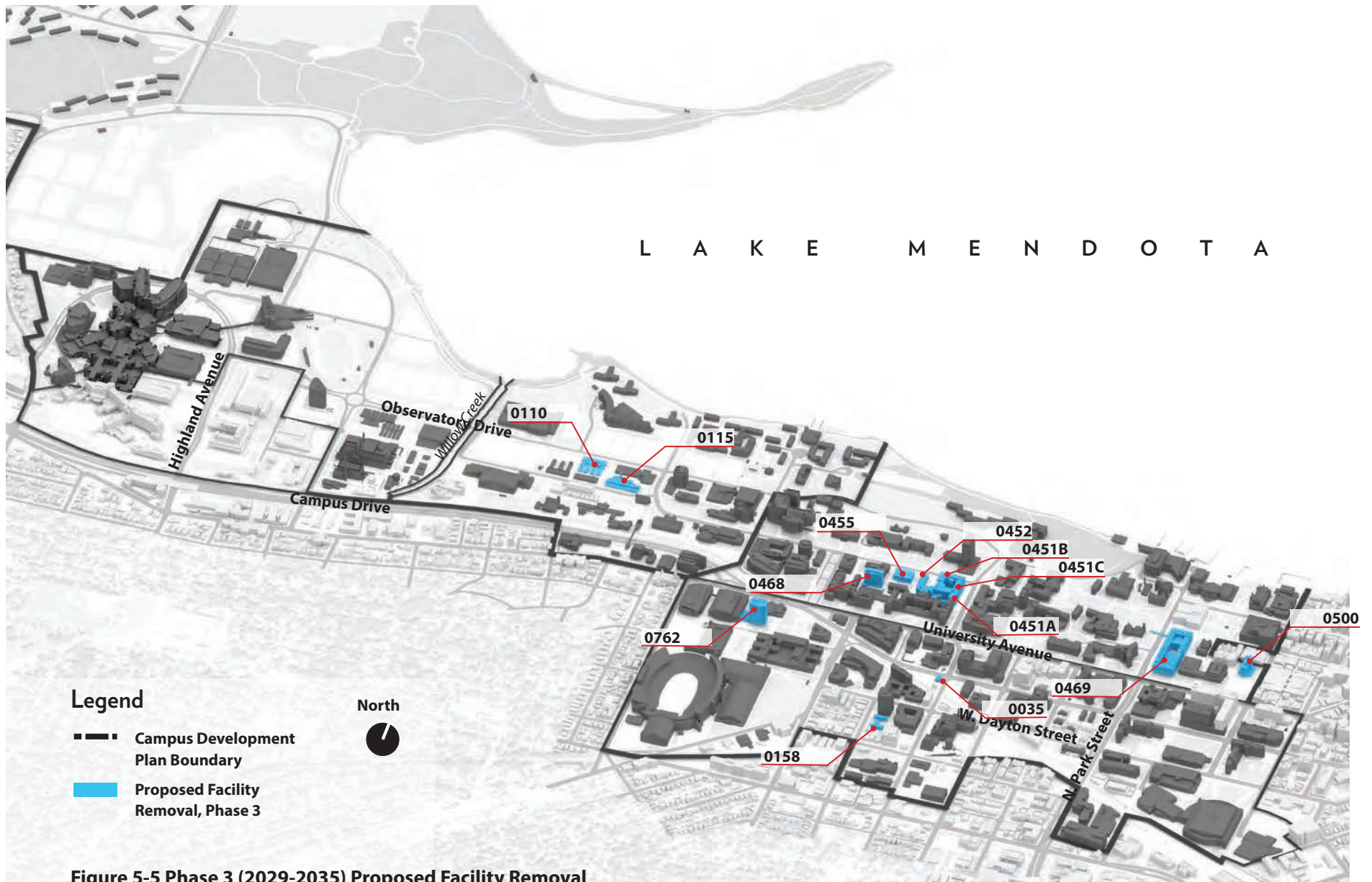


Table 5-3 Phase 3 – 2029 to 2035 Long Term Improvements, continued

Proposed Construction			
	ID	Name	GSF
Near West	W-20	Poultry & Livestock Lab Building	52,965
	W-01	Wisconsin Institutes for Medical Research Phase 3	308,000
Central	N-04	Academic/Research (Stovall Site)	82,200
	N-06A	Academic/Research (SMI Bardeen Med Sciences site)	144,000
	N-11A	Academic/Research (Mosse site north)	84,000
	N-12A	Academic/Research (Mosse site south)	135,000
	N-13C	Music Phase 3	75,000
South	S-01	Engineering Research Building Replacement	271,667
	S-03B	Wisconsin Institute for Discovery, Phase 2	392,000
	S-08A	Academic/Research	22,000
	S-28	Academic/Research (Meiklejohn Site)	84,470
Total Building Space Gained			1,651,302
	N-05C	Parking Structure (Lot 20 Site)	144,000
	N-06B	Parking Structure (Under N-05B & N-06A)	194,400
	N-11B	Parking Structure (Under N-11A and N-12A)	162,000

Phase 3 – 2029 to 2035 Long Term Improvements

Total Building Space Removed	1,080,357
Total Building Space Gained	1,605,302
Phase 3 Total Net Change	570,945

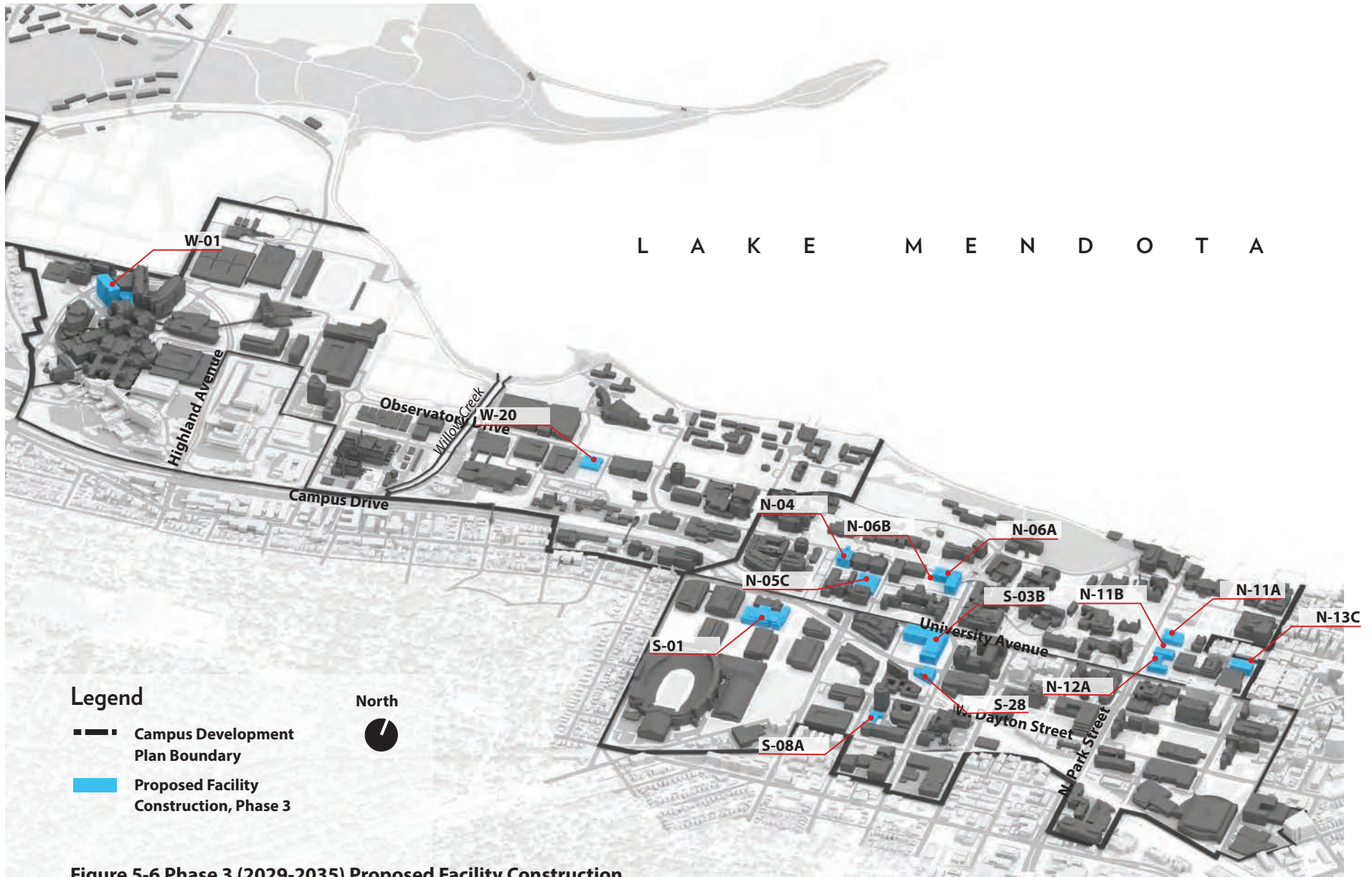


Figure 5-6 Phase 3 (2029-2035) Proposed Facility Construction

5. PROPOSED PROJECT PHASING

Table 5-4 Phase 4 – 2035+ Future Capacity

Proposed Removal			
	ID	Name	GSF
West	0045	Biotron Laboratory	106,907
	0089	Barley and Malt Lab	16,900
	0108	Herrick Drive 505	1,139
	0109	Herrick Drive 509	2,048
	0125	Physical Plant-Grounds Storage	2,560
	0128	Linden Drive 2115	8,756
	0173	McClimon Track Ticket Booth	60
	0222	Herrick Drive 525 – Electrical Storage	3,630
	0223	Physical Plant-Grounds Storage 2	480
	0465	Linden Drive 2105	1,860
	1020	McClimon Track Shelter-South	120
	1021	McClimon Track Shelter-North	120
	1022	McClimon Track Restrooms	–
	1023	McClimon Track Concession Stand	–
	1024	McClimon Track Storage	–
	0094	Biomedical Sciences Laboratories, Hanson, Robert P	43,519
	0099	Agricultural Engineering Laboratory	32,654
	0123	Meat Science and Muscle Biology Lab	30,190

Proposed Removal			
	ID	Name	GSF
Central	0074A	King Hall (Greenhouse Only)	21,478
	0102	Henry Mall 445	54,750
	0449	Nutritional Sciences	56,502
	0453	School of Social Work Building	41,344
	0482	Van Hise Hall	226,940
South	0408	Engineering Hall	464,768
	0402	Noland Zoology Building, Lowell E	92,818
	0404	Wendt Commons, Kurt F	74,459
	0401	Zoology Research Building	44,256
	0527	Harlow Primate Lab	36,944
	0526	Primate Center, Wisconsin	31,606
	0504	Charter St N 45	22,110
Total Building Space Removed			1,418,918

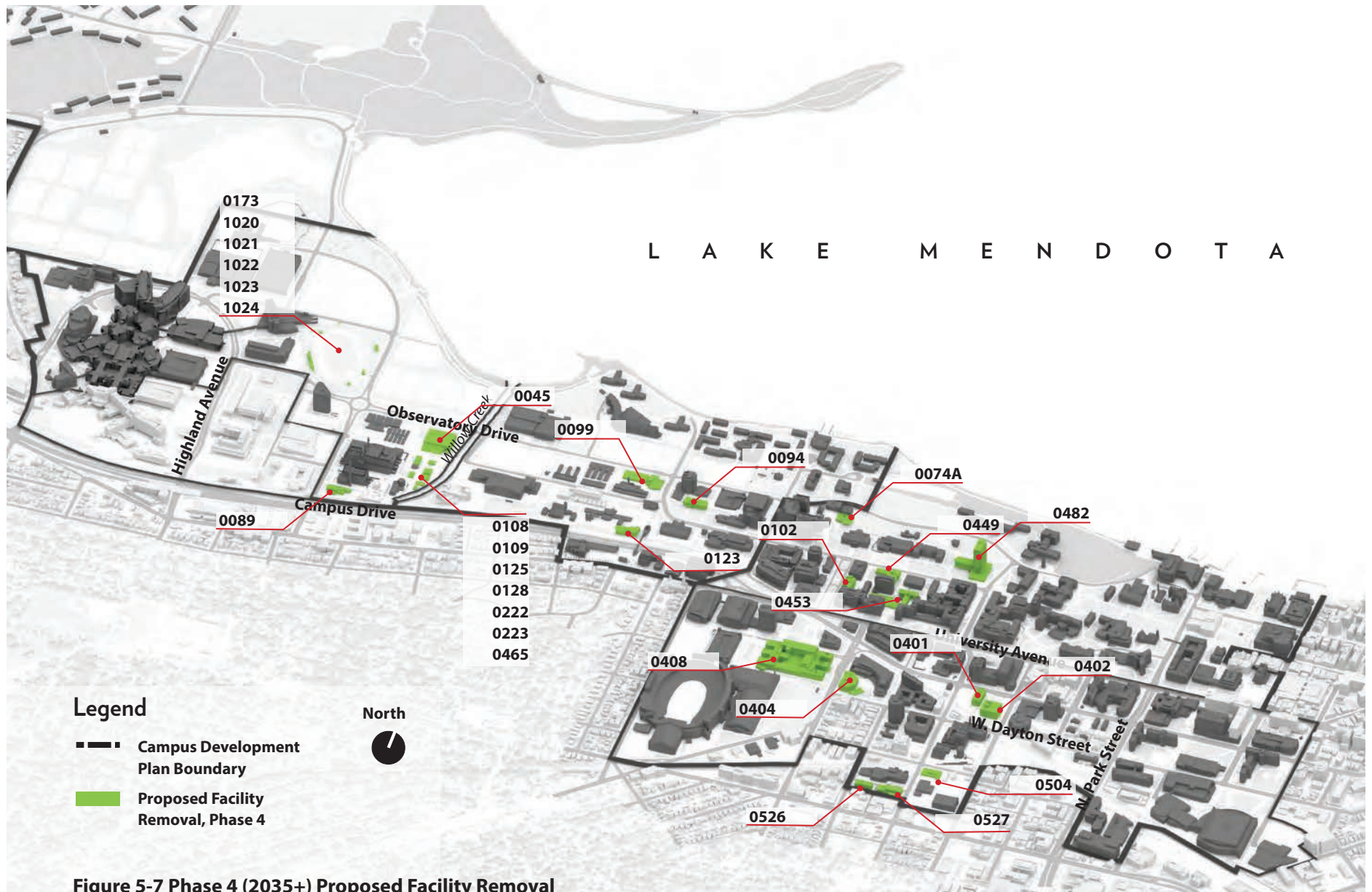


Figure 5-7 Phase 4 (2035+) Proposed Facility Removal

Table 5-4 Phase 4 – 2035+ Future Capacity, continued

Proposed Construction			
	ID	Name	GSF
West	W-04A	Health Sciences Expansion	60,500
	W-05	McClimon Track/Soccer Grandstand	78,000
	W-06	Social/Dining/Meeting Rooms/Health Sciences	126,800
	W-07	Health Sciences Research	121,938
	W-08	Cooper Hall Addition	30,000
	W-09B	Health Sciences Research	233,250
	W-09C	Health Sciences Research	231,000
	W-11	WARF Addition	192,000
	W-13	Health Sciences Research	164,185
	W-30	Grounds Storage A – Controlled Temp	3,000
	W-31	Grounds Storage B – Covered	–
	W-32	Grounds Greenhouse	6,000
	W-33	Grounds Storage C – Salt	3,500
	W-34	Grounds Office/Administration	3,000
Near West	W-19	Biological Systems Engineering	246,000
	W-22	Animal Sciences (AHABS)	85,000
	W-24	Plant Sciences	100,000
Central	N-03A	Academic/Research (Van Hise site)	114,000
	N-03B	Academic/Research (Van Hise site)	48,000
	N-05A	Academic/Research (Nutritional Sciences site)	180,000
	N-05B	Academic/Research (Middleton site)	165,000
	N-07	Academic/Research (445 Henry site)	30,000
	N-15	King Hall Greenhouse	7,500

Proposed Construction			
	ID	Name	GSF
South	S-07	Zoology Research and Noland Hall	419,888
	S-08B	Weeks Hall Addition	5,000
	S-08C	Academic/Research (Spring St)	150,000
	S-09A	Primate Center & Harlow Expansion	48,822
	S-09C	Primate Center & Harlow Expansion	60,000
	S-09D	Primate Center & Harlow Expansion	96,000
	S-11A	Academic/Research (Lot 45 Site)	30,000
	S-16A	Art Building	162,000
	S-20	Fluno Addition	43,200
	S-22	University Research Park (Lorch St)	34,000
	S-23	New Engineering	204,000
	S-24	New Engineering	236,583
	S-25	New Engineering	274,986
	S-26	New Engineering	169,506
Total Building Space Gained			5,269,058
	W-09A	Parking Structure	504,000
	S-10A	Parking Structure (Physical Plant)	148,800
	S-16C	Parking Structure	108,000
	S-27	Parking Structure (Engineering)	345,600

Phase 4 – 2035+ Future Capacity

Total Building Space Removed	1,418,918
Total Building Space Gained	4,162,658
Phase 4 Total Net Change	2,743,740



5. PROPOSED PROJECT PHASING

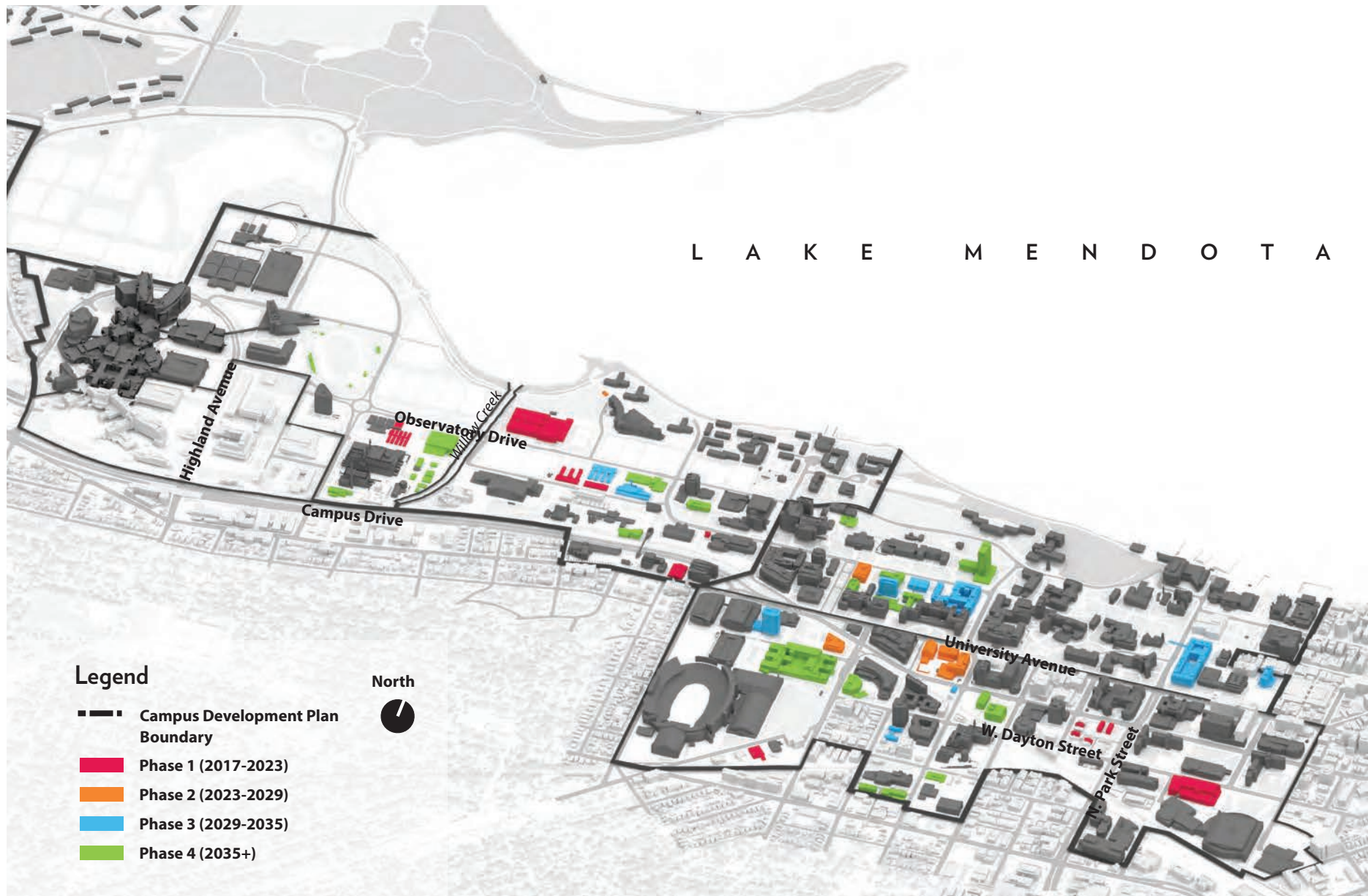


Figure 5-9 All Phases Proposed Facility Removal



Figure 5-10 All Phases Proposed Facility Construction